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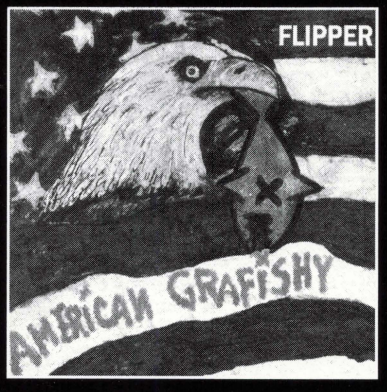

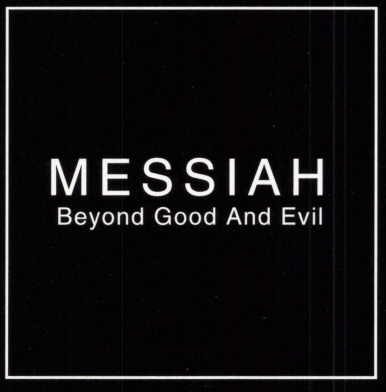

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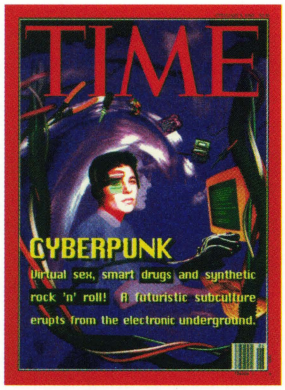
I'm a Dec* Head!

Just got the new Elvis Costello CD the *Juliet Letters.* It's awesome. That's my record review for this issue—I'm a Dec Head.

Well what do you want to hear about first, the Cover—or my Christmas vacation at EuroDisney?... yeah right—like you get to choose—like this column is interactive (or even democratic).

So, the cover. That's **Jade** wearing a truly wonderful gown by **Ondyne Herschelle** of San Francisco. There's more of Jade and his fellow models **Brigit** and **Jonathan**, plus **Heide** and **Stafford** starting on page 54—we call it the fashion section.

This is, by the way, issue number nine (9) of MONDO which may explain why the Beatles are on the spine. The spine, as always, was created by **John Borruso** (often seen wearing a hat.) Of course maybe that doesn't explain anything at all. I mean about the Beatles, not John's hat.


TIME
CYBERPUNK
Virtual sex, smart drugs and synthetic rock 'n' roll! A futuristic subculture erupts from the electronic underground.
Thanks TIME!

Did you see the **TIME** magazine cover story of February 8th? It was the special MONDO 2000 issue as far as we were concerned. Our associate art director **Heide Foley** emblazoned the cover—did I mention that I did the cover? The illustration that opens the article was by **John Borruso** (occasionally seen wearing a hat, but often not) and the closing image was provided by **Mark Landman,** one of the original MONDO artists. I'd like to thank **Kevin Twombly** of **Custom Process** in Berkeley for the use of the **Kodak DCS200** digital camera which I used to shoot **HideMaster** on the cover. Also thanks to **Spot 1019** for use of the lyrics of "Sons of the Revolution" which appear on the monitor. Thanks to Ace Hardware for the **Sculpey,** toxic waste gloves and electrical wire.

This issue has some new fontage (font usage), just to show you I have an open mind, and that I will try some new things, although I still have great fondness (fontness) for Helvetica and Palatino. So thanks to **Rodney Shelden Fehsenfeld** for the following fonts: **Achilles blur**, EIGENSTATE-REG, Fehsenfeld bold, **Global**, and TRYPTIK.

Oh you know, if you like the design work we do here at M2, and would like to learn how its done—from selecting the right coffee beans and smart pills to layout and imaging—then take my course at the **Center for Creative Imaging** in Camden, Maine this August. If you don't like the design of this magazine, then you're probably the **Village Voice** (Hi Albert! Hi Richard!). The phone number at CCI is 800.428.7400.

Well, the time has come to mention more names and here they are; **Bruce Peterson**: Photographer/Mentor. Everything I know about lighting I learned from Bruce. Bruce did the Computer Wearables Photo/illustration on page 22. **Wendi Peterson** on the other hand did the illustration for "Computer as Furoshiki" on page 26. By the same token **Heather Peterson** cuts my hair. She also cuts **Heide**'s and **Andrew**'s hair. **Jon Gipe**. Jon Gipe is a mind

* as in **Declan** McManus

thumping, desert stomping, phototropic awards junky who did the photo for **Nick Herbert**'s Fringe Science column on page 28. **Julia Scher**'s portrait in blue on page 34 was taken by **Joseph Cultice**; not only an excellent photographer but he had one of the best bands I'd ever seen—"Hooks for Hands." Sorry you missed 'em. Just in case you think everything in MONDO is done on the computer, witness **J K Potter**'s photos of **Lydia Lunch** on page 40, done in the traditional photo retouching method. Also **Eric White**'s **Richard Linklater** portrait on page 80 was **painted**, yes, with paint, like with brushes and stuff. Which page is **Dave Fremont**'s comic strip on? I can't remember—look for it on a right hand page. Should I thank some more vendors now? Now is good. Thanks to **Tulip Publishing** in Berkeley for the hi-res scans and the imagesetter output. Thanks to **Thurston Productions** in SF for the film recorder transparencies, thanks to **Quad Graphics** in Wisconsin for the excellent printing of this mag. Thanks to **Tiffany Brown** for being in this photo and for showing up in a moment's notice to be photoraphed for the TIME article. **Jacqueline Neuwirth** did the photo illustration of **Chris Hudak** for the MONDO T-shirt ad on page 64, and for this we are truly grateful. For **Jill Greenberg** we're building a shrine. Need I say more? Thanks to **Glen Mitsumura** for the **Eric Drexler** photo on page 94. Thanks to **Winchester Cathedral** for the use of their interior for the **William Latham** photos on page 86 and our sincere thanks to **Jas. Morgan,** our Music & Arts editor for setting up the shoot in England (where my heart lies). Thanks to **GWAR** for not spewing **blood** and **semen** on my camera equipment. **Khyal Braun!** hey, thanks for the gifts and the Contents page illustration, your haircut looks nice, too. Thanks **mom.** ?

Bye.

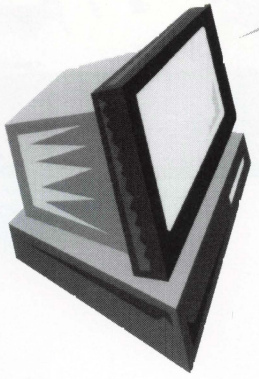
—Bart

Technical Info: Macintosh IIfx computers, HP, Microtek, and Hell scanners, Agfa Selectset 7000 imagesetter, Quark XPress, Adobe Photoshop, Illustrator software. Our service bureau is Tulip Graphics, Berkeley, CA. Our printer is Quad Graphics, Sussex, WI.

Always consider MONDO 2000 as your beta test site for software or hardware; we're ready to walk the techno-edge wit u, baby.

As of February 12th, message section 14 on the Macintosh Clubhouse Forum (GO MACCLUB) and database 10 of that forum will be "Meet MONDO 2000." Surf on in!

L-TV



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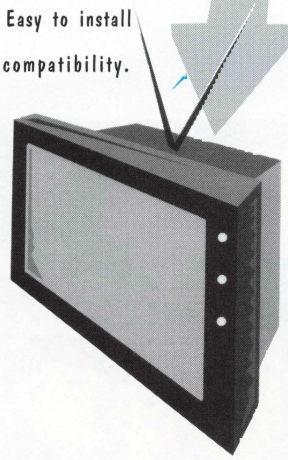

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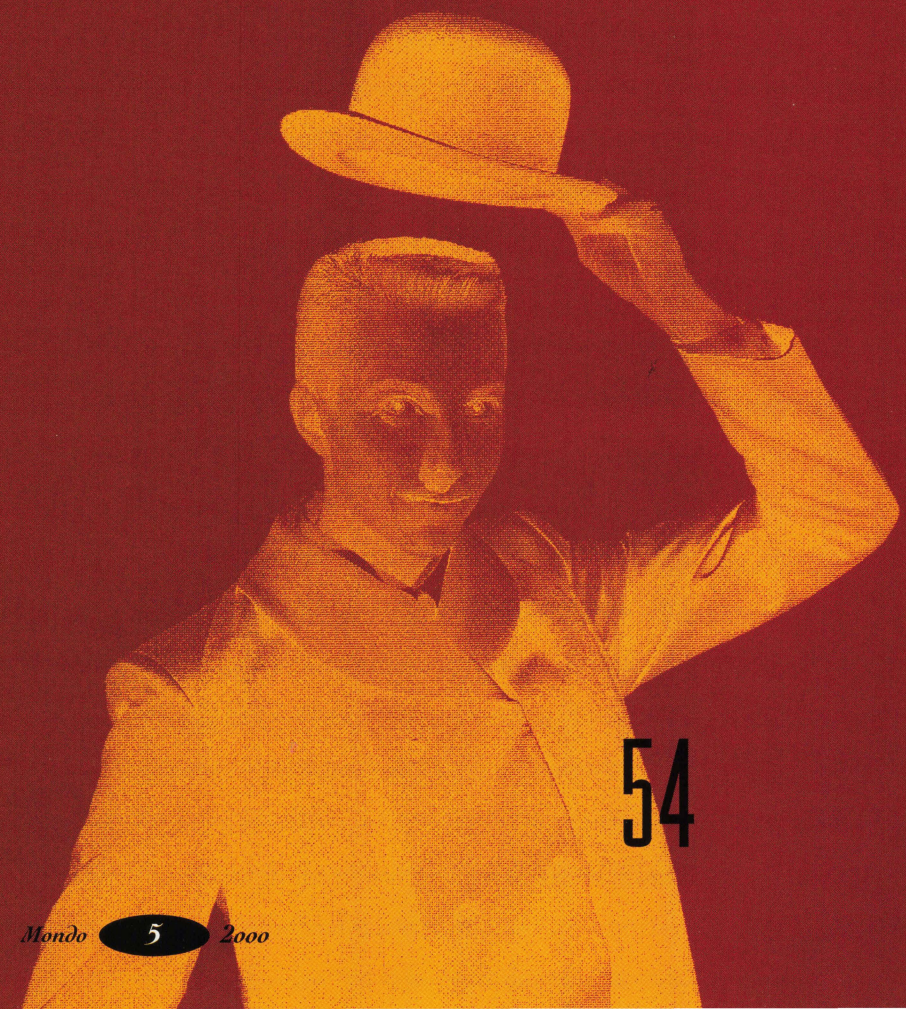

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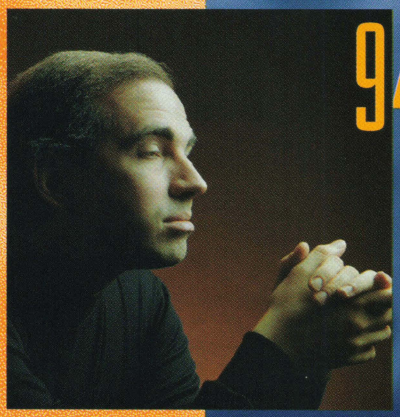

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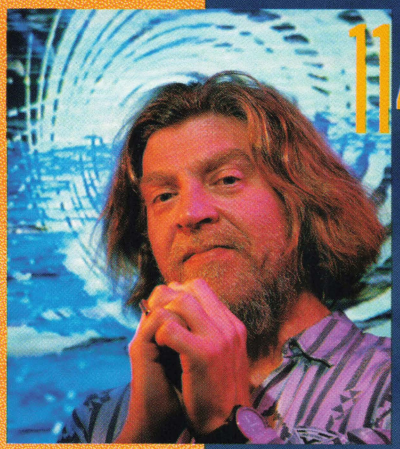

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CLOSET MONDOIDS

To all Mondists:

Do you realize what you've *done*? Probably you never realized what horrible damage could be done to your circulation just by taking the Quarterdeck ad off the back cover of Issue #8! Please, please, *please* put it back—even if you have to run it free! A Microsoft Windows ad would be even better.

Consider you humble wage slave, taking a break with MONDO to catch a glimpse of the world outside his fluorescent-lit prison, when in walks the Lord High Under Assistant Administrator for Administration.

LHUAAA: Hrrrumph—reading on the job again, Sayers?

HWS: (Quickly closes magazine backside up) Just keeping up with the trades, sir…

LHUAAA: (Peers over nose) Oh… uh… *PC Week*, I see. Right. Just remember you have a deadline to meet. (Wandering off) Did he spill ink on the spine of that issue, or…?

And now, thanks to grubby decadent materialism, you've spoiled it all for us secret Mondoids! Please remedy this in the next issue.

Evan B. Sayers,
Santa Ana, CA

ROUND TWO

Dear Sirs,
From all us Slackers to all you Boomers…
HAHAHAHAHAHA! WE HAVE SATELLITE MOUNTED RAIL-GUNS!
HEH HEH. Who's laughing now?

Best,
S. Lang,
Great Barrington, MA

HIDDEN EYECONOGRAPHY

4:00 A.M.

As I lie here in my sixth sleepless day pondering an uncertain future, a few comments on your incredibly mind-opening mag's fave subjects. First, my copy of Gibson's *Neuromancer* paradoxically has the word "Analog" printed on every other page. Odd for such a digital book. The cognizant will know that this is the true first edition.

All you *Blade Runner* fans should check out a Japanese animated video and see how many references to this precursor of cyberpunk you can find. I would recommend starting with *Bubblegum Crises* Vols. 1-8 or *Appleseed* for starters. With main characters like Priss and the replicants or A.J. Schastion

you know you're in for some new inputs. And speaking of *Blade Runner*, what the hell is Ridley Scott trying to say with his emphasis on eyes throughout the movie: Opening scenes show reflection of eyes of man administering Voight-Kampf Test (measures dilation and contraction of pupils of eyes of subject in response to questioning) to Leon; Electronic Owl (known for large eyes and keen night vision); Eye maker; LCD glasses over eyes of man in crowd scene; Roy gouges out eyes of maker. You get the drift. If you want a real mindfuck, read the book (*Do Androids Dream of Electric Sheep?* by Philip K. Dick, not in print, but available in better libraries). Possibly the best novel in existence.

My bedroom has no windows! Talk about paranoia. I was right after all. You can't track me with Information America Network (MONDO #8)—Ha ha and fuck all you cops who have put a loaded pistol to my head.

Hope there's a next time,
Rob
The Commonwealth of Virginia
Not a State (of mind)
Don't move here!

CYBERSPACE AGORAPHOBIA

MONDO,

I feel compelled to thank you for publishing this magazine. I was first exposed to M2 about this time last year when I lived up in SF for a couple months. I was intrigued even then but now, having seen the way this magazine mutates and develops with time… well, let's just say you have a new disciple.

The artwork is what initially attracted me and the music reviews are along my tastes. Quantum physics and conspiracy theory are old loves, not to mention psychedelics.

Also, I was extremely pleased to read your article on "MindVox" about the recent innovations of Legion of Doom members Dead Lord and Lord Digital. As a teenager, some of my closest friends were LoD members and it pleased me immensely to hear that other hackers/phreaks are still on the cutting edge. The article by Kroupa mirrored my own feelings about what went on in the hack/phreak community in the 80's. As I hit adulthood my public education was headed nowhere and as a phreak I became legally entangled in some sticky situations involving the Secret Service and chose to drop out of the scene rather than become an electronic martyr like so many others. I would like to thank your magazine for inspiring me to pick up where I left off and add to it the amazing things I have learned since then.

One thing I would like to mention to you is this: When I was nineteen or so, having lived in the "nets" for about

Sean Smith

four years, I started to realize the simultaneous smallness and enormity of "cyberspace." At times I could feel myself as small as an electron lost in a labyrinth of phonelines and circuitboards. This was another reason I dropped out of the nets. I now plan on re-entering the computer-telecom society and maybe it WAS all that acid I was taking at the time, but I just want to go on record in case others experience this cyberspace agoraphobia.

Anyhow, thank you, and yes, we'll change the world... expect my subscription card soon.

Later,
ClashM...
Tucson, AZ

SHAMANANARCHY WAVE

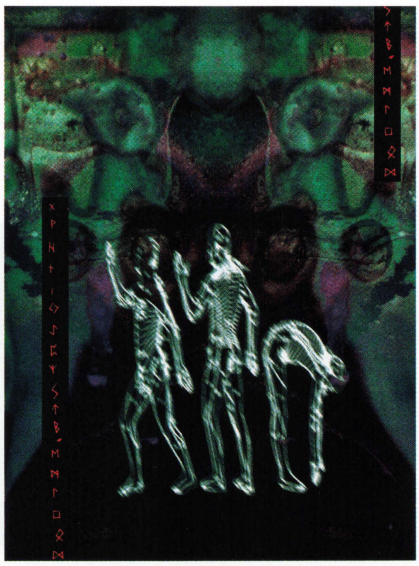
Dear Mondoids,
Why do you guys persist in promulgating the fiction that the UK House Music scene was killed off 2 years ago?!? (Last two mags and now the *User's Guide to the New Edge*).

The currents of pop House, the necessary first shake-it-all-loose stage of Rave Culture, already swirl undeniably round America's ankles. But in Europe, still 3 years ahead, the next tide, the Shamananarchy Wave, prepares to finally swamp America and then the planet in a brand new cultural glue that has the potential to stick all the disparate parts back together. *Dare* to believe it! Or read on to be convinced.

The fact is that the UK Rave scene, far from getting bashed out of existence by the authorities, GOT PUSHED UNDERGROUND, which is a totally different thing. With their bucks no longer guaranteed, for example, the trendy big money/fashion promoters got squeezed out (many chased the Godalmighty Dollar to California) thus purifying and further advancing the scene here.

And so, underground and mostly illegal, the real Acid House scene has continued to expand, massively, and has now birthed a "festi-rave," "Hippy House" crossover counterculture that is rapidly becoming radicalized, politicized, ecologized, culturally rooted, hedonically opened—and all within the current and deepening Slump & final Collapse of the Old System etc., etc.

DEMAND AN ALTERED STATE!
Our latest album release *Shamananarchy in the UK* is so-called because the 2 frontiers are not VR and nanotechnology on their own but shamanism and anarchy PLUS Techno (consciousness raising and a new society based on personal freedom). Saving our planet doesn't lie in new tools but in who gets their hands on them and for what.



Or to put it another way, Mondoids: if a new culture doesn't make its appearance soon to connect us all into a movement that grabs back control of the planet, then all the techno in MONDO's pages will ultimately maximize killing Iraqis or economically enslaving Russians.

The whole Shamananarchy culture consists of people living and working communally, as posses of urban nomads, illegal tribes of techno guerrillas, but in such increasing numbers that they are starting to explode onto the overground—raves being the cultural flashpoints. Even the overground has spotted the phenomenon and is now scrabbling like crazy to mix in some "ethnic," some "message," some "revolution," etc. Spiral Tribe, Eat Static, Tribal Drift, Irresistible Force, Australasia—they're all on *Shamananarchy in the UK* and they're all going to be the mega House bands of the 90's.

The Shamen, who are now starting to break in the U.S., are merely the final ghost of corrupt ol' Rock 'n' Roll ripping off, as ever, an alternative lifestyle image they'd never *dream* of living. And yet it's poetic, god what fun it is to be alive today—*Big Music Biz building the bridge to its own final demise!*—the Shamananarchy scene clamouring behind it, whose participants are already living the much much more hugely exciting lifestyle which will dominate, restructure and relaunch after the collapse of the Competitor System meme.

And watch out, America, for the news is genuinely more scary and blissful than you can imagine! Hang very very loose is the only rule from here on in. And remember: The Last Left Standing Wins!

Fraser, that True Believer &
Sometimes Slightly Fascistic Cultural
Troublemaker From Way Back
Whom You Can't Help But Love
(as your New Edge manual so
endearingly describes me!)

DISEMBODIED DANCE

Mondoids:
I am planning to work up an article with pacoid about the Advanced Design Research Group and the work of Marcos Novak. If you remember at lunch I made a few comments about Marcos Novak and the concept of "poetic mapping" as well as my personal theories about proxemics and spatial archetypes.

I have been accepted into the ADRG and will be joining them in the fall. If you have ever heard of Sandy Stone then you also know that the ADRG has been working closely to the UT communications dept. in a coup to

Joseph Seuferling

marry the program in the west coast leader in academic VR research. The ideas there are a lot more exciting than the programs at MIT, and more philosophically ambitious.

Marcos sent me e-mail relating his interest in producing the article:

Mondoid overtures have been made a few times, but we haven't taken any concrete actions. I think it would be very important to the program for that exposure to take place sooner rather than later, and so I am pleased you communicated your interest. As I see it there are two opportunities: a personal one, and a collaborative one. The first would have to do with my own work, liquid architecture, navigable music, habitable theater, disembodied dance, virtual poetics, worldmaking, ADR, and the ideas that are carrying everything along; the second would have to do with the Banff project and the collaboration between an architect, a dancer, and a designer in the making of five (count 'em) worlds, ranging from the very physical to the very non-physical. This is a great time to have something happen, since it seems a lot of people have been asking me for contributions to publications, shows, etc.... Anything you can do to make these things happen faster will be appreciated, and anyway you can advance your own work will be encouraged and supported. You may want to put together the article yourself, or encourage Paco to get to it, as you see fit.

That's straight from the horse's mouth.

I am currently working up a media propaganda packet for Marcos. I will be working with pacoid via net jam. If you are interested in accessing this project for publication contact me.

Clay Graham (cyber23)
Foster City, CA

FIRE SALE

Xandor,
Have you heard the concept of people being *bussed in* to start fires in L.A.? I didn't see any media coverage of anyone actually *starting* a fire, and the fact (?) that they were set in a *line*, where the new light Railway System wants to go... cheap property. Amazing how much they covered with one *incident*.

Leia,
San Francisco, CA

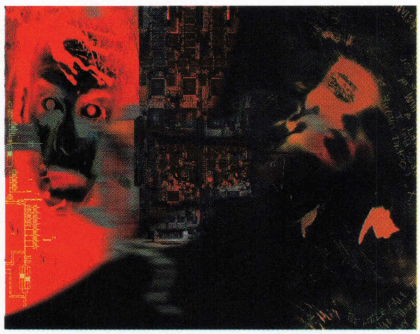
CYBERBABE WANTED

To St. Jude, a.k.a. Lady Ada Lovelace

Lady Ada,
I don't face-to-face much either. In fact, the more I hack, the more my computer seems to bristle with all the gleaming sexiness and twisted values I could ever hope for from actual flesh-and-blood people. So why leave the terminal?

I hack, therefore I am.

But here's the question I'm really writing to ask you: is the Lady single?



Yes, that's right, you are experiencing an E-come on.

Here's the deal: No dweebish horn-rimmed hackers here, but a dark and handsome twenty-eight-year-old specimen, with lush black hair. More than a few members of your gender give me the look that says *yum*.

Why do I make such boastful commentary?

You pique my interest, that's why. And after reading your "Woman's Home Companion" I conclude that you're not asexual. Bottom Line: I want a cyber babe, and you seem rife with potential.

Besides, I'm a safe three thousand away, here in NYC. So drop us a line. Say hi, why don't ya.

Robert Mark
New York, N.Y.

UP FROM DOWN UNDER

Mr. (Implant) Ed.
Jeez cobber—pseudo MONDO retro. She's a beauty cyber-vernac. Down under in Kiwi-land mate. Got a Quadra and MONDOs in the cowshed-bog mate—beats stick books, eh mate? Plus scanner equals vir. bogroll landscape mate. Bit of a dag, eh? Down on the farm. The chooks are nervespliced mainline and jacking 4D from the Amiga on the front porch. And they're real country chickens mate—they'll take over the farm one day.

Tatah,
Speedway Farmer,
NEW ZEALAND

P.S. We never heard of Prince Alberts down under—why not put *free* ones in next MONDO issue?
P.P.S. Start a farm-tech column. Ever done IBVA with a sheep? Eh, mate???

HOMEMADE SORCERER

To MONDO 2000 and associates,
I'm a writer recently arrived back in this state after a year on the road in Latin America. I am also a homemade sorcerer with a dynamic harmony/discord philosophy and I have a zero bullshit method of writing on this subject—but I can do encryptions. Your magazine and a certain woman have inspired me immensely, and I do have a little direct feedback on your work.

To wit: Diamanda Galas—ever think maybe AIDS could be medical voodoo??? I've heard from two independent researchers, one in the States and one in Chile, that "AIDS does not exist!"

Die Warzau—"NO LIMITS" (trip mantra); "ALL POWER TO THE IMAGINATION!" (found spraypainted on bridge in Santa Cruz).

William Vollmann—I know what you mean about not being able to know the foreign other. I tried to abandon this country because I thought hatred did not exist in certain other countries such as those far to the south (i.e. not

Joseph Seuferling

mentioned on the maps), instead I found a surprisingly industrialized, machine gun enforced reign of terror. I did not find paradise. In fact I decided I actually like the more chaotic and semi-feudal barbaric system we have here, I think it's flexible and changing, I feel like freedom in the true sense exists as a possibility here and I think we ought to claim it permanently as individuals if not as groups. I want to be able to say to future generations of this land that America was stolen and the tribes took it back.

Uncoiled!—Experimenting with the dragon currents may be tricky and dangerous, but it's well worth the risk. Of course, not everyone I would imagine wants to pay the price that power exacts.

U2 and Negativland—Direct confrontation—I like it!

DeLanda Destratified—I found a way to remake my mind and become detached about things that used to disturb me. I now see an interesting connection between cars, rock 'n' roll, sex, drugs, the reptile brain and the 93 current of Crowleyan magick.

By the way—simply exquisite photos and visual material in #8.

Loki Moondragon
Rock 'n' Roll Mercenary
Santa Cruz, CA

8TH DIMENSION E-MAIL

Xandor,
I just got into Hong Kong for a Cavaliers gig. I saw your letter in a MONDO zine laying around backstage. What the hell is wrong with you? You know damn well that you should be using your encoder for that kind of subject matter.

Anyway, I talked to Buckaroo; he says the next time we're in Vegas, we can round up some blue-blazer regulars and take the aliens out. Look, we iced Warfen, got rid of communism in the U.S.S.R. We can handle this. Stay cool.

Perfect Tommy,
Grand Hyatt
HONG KONG

INFORMATION SOCIETY
PEACE AND LOVE, INC.
PEACE AND LOVE
The New Album featuring the hit song "Peace & Love, Inc."
On Tommy Boy/Reprise cassettes and compact discs ©1992 Tommy Boy Music, Inc.

Snoop Cryptography

The Bad Boys of cryptography are at it again. On September 3, Philip Zimmermann and his disciples released their new-and-improved version of PGP in Europe. Even more subversive than the original, it's quickly making its way around the world.

We first told you about PGP (Pretty Good Privacy) and its creator, Phil Zimmermann, in MONDO #5. PGP is a highly sophisticated public key and conventional encryption system for personal computers. Though available as freeware, PGP gives ordinary people the same data and communications security that governments spend millions to get.

PGP 1.0 was a very American, home-grown act of guerrilla techno-monkeywrenching. Zimmermann wrote PGP in a white-hot feverish rush against time. Legislation was being pushed through Congress that would have outlawed the sale of privacy oriented encryption software—unless it was emasculated with a government-accessible back door. Phil wanted to make certain that an easy-to-use, powerful and uncompromised "volkscode" was available to everyone if any such law were passed. He succeeded beyond his wildest dreams. In mere months, PGP has circled the globe. At least one copy probably exists in every nation on earth. It has become the de facto encryption standard for cyberspace.

By contrast, PGP 2.0 is much more international in design and outlook. After the release of PGP 1.0, the pressure was off. Zimmermann was free to take the time to assemble a multi-national team of volunteers to develop PGP 2.0 at a more leisurely pace. Because PGP had become such a sensation around the world, the improvements and new features reflected this pan-cultural influence.

The most telling proof is in the language options. PGP 2.0 uses Latin1, an extended ASCII character set, that can represent most European alphabets. In addition, PGP messages can be displayed in English, Spanish, Dutch, German, French, Italian, Russian, Latvian and Lithuanian. More languages will be added later. Improvements have also been made to facilitate the use and privacy protection of e-mail and personal files.

Not surprisingly, there is an almost fanatic devotion to PGP in the former Soviet Union and other East European countries. The release of 2.0 was an important event in countries that had not had any privacy or other personal freedoms for decades. With the old KGB-style organizations gone, and new ones not yet in place, citizens of former Iron Curtain countries are arming themselves with PGP and other technologies of freedom. Their motto could borrowed from the Jewish Defense League—"Never Again."

Norman French

Doug Aitken

One of the most appealing aspects of PGP 2.0—to former Soviets especially—is its unique approach to the "authentication" problem. Because public-key encryption systems allow people who have never met to communicate, the problem of identity verification can arise. In a nutshell, when you use someone's published public key to encrypt a message, how do you know it is really their key? How do you know that someone else didn't substitute their public key in the place of the one belonging to the person with whom you want to communicate? Obviously, some form of authentication is needed to keep from breaching the privacy of your messages.

In the United States and elsewhere, the governments favor a hierarchical authentication system—preferably with themselves at the top of the ladder. In such a system, every layer of authentication is derived from the next higher level of a constantly narrowing pyramid. It goes without saying, such a structure gives those at the top the absolute power to abuse the system. And as we all know, "power corrupts, and absolute power..."

With PGP 2.0, however, a totally decentralized system of authentication is possible. PGP 2.0 software system transparently incorporates a system of personal "public key certification." Under this structure, a public key may be verified by one or more third-party digital signatures. Each signature would be made using the third-party's private key. If you wished to send a message to someone whom you had not met, you could first examine the public key certificates attached to their public key. If any of them were digitally signed by someone you know and trust, you could check those signatures using the corresponding public keys. No impostor could fool you, because no one can forge your friends' electronic signatures.

This informal and organic method of authentication is profoundly anti-authoritarian. It significantly enhances PGP's mission to put power back in the hands of the individual. Further, it reflects the way people naturally interact in their personal and social lives.

Why Do You Need PGP?

Philip Zimmermann

It's personal. It's private. And it's no one's business but yours. You may be planning a political campaign, discussing your taxes, or having an illicit affair. Or you may be doing something that you feel shouldn't be illegal, but is. Whatever it is, you don't want your private electronic mail or confidential documents read by anyone else. There's nothing wrong with asserting your privacy. Privacy is as apple-pie as the Constitution.

Perhaps you think your e-mail is legitimate enough that encryption is unwarranted. If you really are a law-abiding citizen with nothing to hide, then why don't you always send your paper mail on postcards? Why not submit to drug testing on demand? Why require a warrant for police searches of your house? Are you trying to hide something? You must be a subversive or a drug dealer if you hide your mail inside envelopes. Or maybe a paranoid nut. Do law-abiding citizens have any need to encrypt their e-mail?

The future of PGP is one of expansion. PGP 1.0 was written for IBM compatibles only. PGP 2.0 has been ported to the PC, Commodore Amiga, Ultrix, VAX/VMS, Atari ST, OS/2 and Unix machines. The long-awaited Mac version should be available during the first quarter of '93.

An update, PGP 2.1, will probably be out by the time you read this. It makes some minor fixes and improvements to the 2.0 release.

One of the very few drawbacks to PGP 2.0 is that it and 1.0 are not compatible. They can't decrypt each other's communications. As a result, new public and private key pairs must be generated for 2.0. Of course, you can keep your 1.0 around to decrypt any messages made with your old public key. Such is the price of progress.

In our first article, we suggested you send Phil some fan mail in the form of federal reserve notes in an envelope (checks aren't very anonymous). Again, fifty dollars sounds about right, but you might place a different value on your privacy. Not required, but a nice gesture toward a guy who passed up thousands of dollars of paying business and risked legal action to fight for your freedom. Here's Phil's address, new phone number and e-mail:

Boulder Software Engineering
3021 11th St.
Boulder, CO 80804
(303) 541-0140
Internet:
prz@sage.cgd.ucar.edu.

If you want the latest edition of PGP, you can get it from Internet at FTP sites uunet.uu.net in the /tmp directory and at host gatekeeper.dec.com, directory /pub/micro/msdos/pgp. It's also available in North American and overseas on Fidonet and many BBSes.

A related technology using PGP, anonymous e-mail forwarding, should be out by the time this is published. At least one such project is being pursued in Silicon Valley. The idea is to create a system whereby encrypted e-mail can be passed through one or more remailing host computers before reaching its ultimate destination. The purpose of all this is to break the "audit trail" between people who wish to communicate without anyone knowing. To accomplish this, e-mail originators put their encrypted message within one or more "envelopes" created using the remailer's public key. The remailer would remove this electronic envelope and forward the e-mail to the address found inside. The developers of the first remailer system intend to offer their program as freeware. Just as with PGP, they want anonymous remailers to proliferate around the world. MONDO will keep you informed of their progress.

M2

What if everyone believed that law-abiding citizens should use postcards for their mail? If some brave soul tried to assert his privacy by using an envelope for his mail, it would draw suspicion. Perhaps the authorities would open his mail to see what he's hiding. Fortunately, we don't live in that kind of world—partly because everyone protects most of their mail with envelopes. Analogously, it would be nice if everyone routinely used encryption for all their e-mail, innocent or not, so that no one drew suspicion by asserting their e-mail privacy with encryption. Think of it as a form of solidarity.

Today, if the Government wants to violate the privacy of ordinary citizens, it has to expend a certain amount of expense and labor to intercept, steam open and read paper mail, or listen to and possibly transcribe spoken telephone conversation. This kind of labor-intensive monitoring is not practical on a large scale. This is only done in important cases when it seems worthwhile.

More and more of our private communications are being routed through electronic channels. Electronic mail will gradually replace conventional paper mail. E-mail messages are just too easy to intercept and scan for interesting keywords. This can be done easily, routinely, automatically, and undetectably on a grand scale. International cablegrams are already scanned this way on a large scale by the NSA.

We are moving toward a future when the nation will be criss-crossed with high capacity fiber optic data networks linking together all our increasingly ubiquitous personal computers. E-mail will be the norm for everyone, not the novelty it is today. Perhaps the Government will protect our e-mail with Government-designed encryption algorithms. Probably most people will trust that. But perhaps some people will prefer their own protective measures.

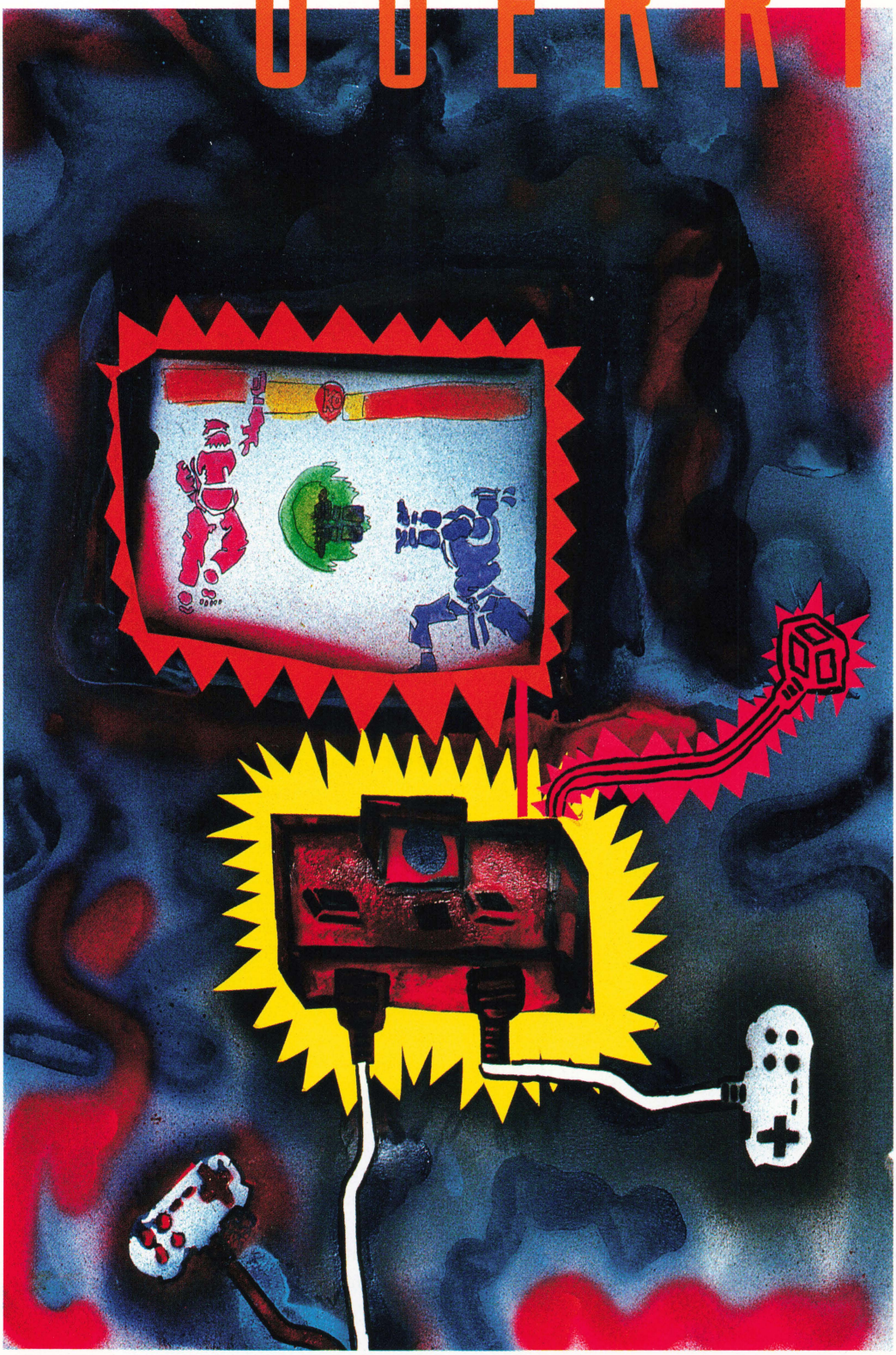
Senate Bill 266, a 1991 omnibus anti-crime bill, had an unsettling measure buried in it. If this non-binding resolution had become real law, it would have forced manufacturers of secure communications equipment to insert special "trap doors" in their products, so that the Government can read anyone's encrypted messages. It reads: "It is the sense of Congress that providers of electronic communications services and manufacturers of electronic communications service equipment shall insure that communications systems permit the Government to obtain the plain text contents of voice, data, and other communications when appropriately authorized by law." This measure was defeated after rigorous protest from civil libertarians and industry groups. But the Government has since introduced other disturbing legislation to work toward similar objectives.

If privacy is outlawed, only outlaws will have privacy. Intelligence agencies have access to good cryptographic technology. So do the big arms and drug traffickers. So do defense contractors, oil companies, and other corporate giants. But ordinary people and grassroots political organizations mostly have not had access to affordable "military grade" public-key cryptographic technology. Until now.

PGP empowers people to take their privacy into their own hands. And if anything is under siege today, it's the institution of privacy. There's a growing social need. That's why I wrote it.

M2

GUERRILLA



The writer says that hardware piracy, unlike software piracy, doesn't really hurt. He reassures you that, should you act on his tips for cracking games, you won't have the collapse of the video game industry on your karma debit list. Is he for real? Is this legal? How about morally defensible? You decide.

Asa Dodsworth

VIDEO GAMING

Craig Engler

Video games aren't the bastion of immutable silicon circuits many would-be pirates are led to believe. Those etched-in-plastic EPROMS are plenty malleable with help from overseas vendors in Hong Kong and Taiwan—two places which don't rate "copyright" high in their lexicon. Walk into the local video store in either place, throw down a few hundred dollars American, and walk out with the answer to price-gouging mega-corps like Nintendo and Sega.

Buy machines like the Super Magicom or Multi Game Doctor II, little black boxes that let you copy hardwired game cartridges onto floppy disks for later replay. You can rent to own carts at the local video store instead of paying exorbitant retail prices, and rumor has it there may be a BBS or two with binary game files ready to download. It's even possible to get pre-release versions of games that filter to your local pirate through Japanese software houses, but these will definitely cost.

HOW IT WORKS

Video game copiers read the ROM on carts and then copy it to floppy disks or battery driven SRAM and DRAM packs. As long as you've got the right hardware, replay the games, copy them and even alter the code for cheats like more lives or invulnerable players. The first copiers were a little barbaric, but an increase in popularity (hey, I'm sure ballistic cart prices had *nothing* to do with it) added perks to the base units. It's possible to buy something that will hook up to your IBM clone so you can tweak code, and there's even a system for playing coin-op boards.

WHAT YOU GET

Most copiers come in different configurations. Buy them for your PC Engine, Super NES/Super Famicom, Sega Genesis/Mega Drive and even the vaunted Neo Geo. Add-ons copy GameBoy and Game Gear carts, and Lynx compatibility isn't far off. Base systems run about $200 plus components.

Example: for the SNES you can get something that will copy carts up to 16 megs for maybe $300 or $400. Nothing fancy, but you avoid pain-in-the-ass fees Nintendo levels on its licensees. For more money, a Multi Game Doctor II is best. The main unit with a disk drive hooks into your game system, then buy a back-up unit and the appropriate interface. About $1,000 will buy a unit to cover almost every system made, though 32 meg DRAMS for the Neo get expensive.

WHAT YOU DON'T GET

CD-ROMs are untouchable (so far). Too much data makes copying impractical. Since that's the way cart systems are headed, pirates need to catch up. Also, if you have a cart with a battery back-up, copiers won't do much good. It's still possible to save your game if you reinsert the original EPROM, but that's self defeating.

IS IT LEGAL? DO YOU CARE?

As far as I can tell, copiers aren't illegal to own (data back-ups... *right*), but *pirating* is. A note on USENET warned that Nintendo and UK customs are cracking down on the Super Magicom/-Super Magic Drive, so it may be best to avoid that system if you're into customer support. No one's yet reported problems bringing copiers into the U.S., and rumors say import houses in New York and Los Angeles carry at least a few.

Is it worth it? If you're an addicted gamer and have friends or a rental place with carts, yes. Unlike software, hardware piracy isn't going to dent the hardened vaults of game companies, so you won't cause a collapse of the video game market. M2

PRODUCTS

MEGA DISK

(Taiwan Sang Ting Co. Ltd.)

Effective on: Sega Genesis/ Mega Drive/Nintendo SNES/Super Famicom

MAGICOM/SUPER COM PRO

(Front Fareast Industrial Corp.)

Effective on: Sega Genesis/ Mega Drive/Nintendo SNES/ Super Famicom

MULTI GAME DOCTOR II

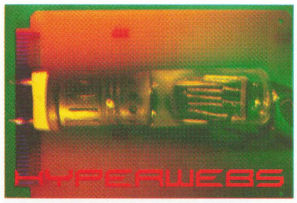
(Makko Toys Co. Ltd.)

Effective on: Sega Genesis/Mega Drive/Game Gear/Nintendo SNES/SuperFamicom/ GameBoy/PC Engine/ Super-Graf/SNK Neo Geo

GAME HUNTER

(Manufacturer Unknown)

Effective on: Sega Genesis/Mega Drive/Nintendo SNES/ Super Famicom



VR UPDATE

VR is going mainstream. When it appears on Wild Palms, *you know it's time to look for wilder shores. Here are some new products and developments to satisfy your* Wilderlust.

Andrew Hultkrans in Virtual Vision Sport goggles

CONSUMER VR: It's not real virtual reality (huh?) yet, but **Virtual Vision Sport** is the next-best thing: a miniature TV display inside wrap-around sunglasses. Perceived image is large (up to five feet), merged with the real world. A belt-based TV tuner also plugs into a camcorder or VCR. Uses: as a color viewfinder for camcorders (you see everything, not just through a tiny lens—and think of the candid shots!), watching TV closeups during sporting events, remote display for wearable computers with NTSC output, or catching your fave TV show as you walk around, work, or just hang out looking cool. The **obligatory '93 cyberpunk accessory**. Available in April for less than $900 (206) 882-7878.

VR video games will be superhot next Christmas, when consumer VR finally hits. Watch for Sega's **Virtua Sega**, a 32-bit color **3D VR helmet for video games**, plus **The Activator,** an $80 **full-body interactive controller for Genesis** that uses IR beams to track body movements (jump, punch, dance) to control gameplay. Disney and Sony are also working on VR-based systems. Horizon Entertainment, the St. Louis-based Virtuality machine VR guys (remember "Cyberspace in the Mall," in Issue 6?), and Paramount are working on a **Starship Enterprise VR environment**, complete with holodeck, transporter, and bridge. First one, due out by the end of '93, will be a mall-based Star Fleet recruiting facility, where customers will receive "cadet training."

MOVIES AND PERFORMANCES *Lawnmower Man* director **Brett Leonard** and *LM* producer **Gamel Everett** are working on two **new VR-oriented movies**: *Lawnmower Man 2* and *The Immortals* (based on the sci-fi book *Software* by **Rudy Rucker**, who co-authored MONDO 2000's *User's Guide to the New Edge*). They're also producing a CBS special on VR, and teaming up with **Billy Idol** and **rave-tech wizards** Digital Media of Santa Cruz to create the ultimate SFX for Billy's future

Sega 3D VR Helmet

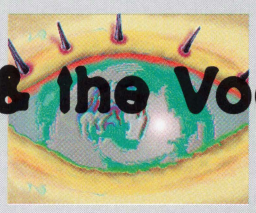
Wes Thomas

cyberpunk album tour... Not to be outdone, **Thomas Dolby** is powwowing with Eric Gullichsen on using virtual worlds in performances.

TELEPRESENCE

Linking virtual worlds by phone is hot. Now that their oxygen is restored, inhabitants of the **Biosphere 2** in Arizona are beginning to build virtuals worlds inside the Biosphere and plan to share them via the Internet. They want to **shake hands remotely** with people from around the globe via a **Power Glove** with signals sent via telephone. Must get lonely inside there. Is this our dismal sci-fi future: virtual contacts between inhabitants of domed cities?... And just how *do* you send full-blown **virtual worlds over low-bandwidth phone lines**? The Diaspar Virtual Reality Network BBS offers online multimedia VR worlds. To transfer them via ordinary modems, they use public-domain Virtual Object Interactive Dictionaries (**VOIDs**). VOIDs transmit only the *difference* in scenes —the hardware and software at each end of a link fill in the gaps to create a full virtual environment at each end. Clever. They'll publish the first CD-ROM with VOIDs on July 4, 1993. (Jonathan Ogden, CompuServe: 75030,426 or jogden@well.sf.ca.us or (714) 831-1776... International TV/special events producer Vicki Lynn (*Live Aid*, *The Who—The Final Concert*) is developing *A Virtual Visit Through the Looking Glass/Alice and Alex in Wonderland*, a VR demo project linking children's museums worldwide. Info: (212) 239-3881.

Jaron & the Voomies



The founder of VPL and co-inventor of the DataGlove, Jaron Lanier has been called the **enfant terrible** *of VR. Quirky and charismatic, his evangelism helped spur the burgeoning VR industry. Recently, the VR community was stunned to find the legendary Jaron and his staff toppled by French conglomerate Thompson. The story had all the elements of epic theater, high intrigue, and a good chess game. One is irresistibly reminded of the sagas of radio pioneers Armstong and de Forest. We asked Jaron for his perspective on it all.*

M2: What really happened at VPL? Was it a monopoly grab for key patents by the French—as some have said?

JL: There was a split between the investors and manufacturing people on the one side and the rest of us—creatives and business—on the other side. Our former parent company, Thompson, is French government-owned, so it was clashing cultures: government bureaucracy vs. us. It's hard to know what really happened—the big question is the evil/stupidity ratio. We took out a series of loans from Thompson, with our patents as collateral. Thompson then failed to raise the promised capital to keep us going. Toward the end, they essentially controlled the company. They later sued us for the rights to all our patents. Thompson *is* alleged to have be involved in French industrial espionage, according to reports in the *San Jose Mercury News*.

M2: Looking back, was there some critical point where things went wrong?

I started VPL at age 24. I was young and innocent; I didn't really know what I was doing. In 1988, when we negotiated an investment by Thompson, they changed the rules at the last minute and offered only half of the money up front and the rest "when we met our goals." I pointed out there was no way I could make our goals with half the money. They futzed around—you know the French carry a kind of psychic airbrush that fuzzes up reality—and in the end I foolishly signed it.

M2: Will this discourage VR research, as some fear?

JL: No. The patents have already been licensed to many companies, so I don't see any real impact on the growth of the VR industry. For example, Radio Shack owns the patent to the portable computer and that hasn't stopped the growth of that market.

M2: What are you doing right now?

JL: I'm feeling good about what I'm doing now. Our two major projects—surgical simulation and simulation for VR entertainment—are continuing.

I'm associated with three companies. At Domain Simulations, Inc., I and a group of ex-VPL people are building VR applications. VR users have been reinventing the wheel until now. We want to

"Eye with Lashes" by Jaron Lanier

develop model software that solves that problem. We're also building a new generation of software tools.

I'm also involved in Media Medical Systems, New Hampshire, which is doing advanced surgical simulations. We've got some top researchers from the Media Lab and other MIT departments.

And I'm affiliated with Quanta Communications, where we're working with Universal Pictures to design "voomies" for high-end VR theaters.

M2: Tell me more about voomies!

JL: Voomies is my name for "virtual movies." They'll use high-quality graphics and hardware, with head-mounted displays for the audience. We'll have live performers called "changelings" who will become virtual animals and other virtual beings. They'll also tell jokes, help the audience, and control the virtual world to respond to each group. It's a new genre of performance art. Alex Singer, our creative director, is a leading Hollywood director who's currently directing the current *Star Trek* TV shows and has directed *Hill Street Blues*, *St. Elsewhere*, and *Cagney and Lacey*.

You know, I've always had a parallel career in performing and music. Last summer I performed "Music From Inside Virtual Reality: The Sound of One Hand" for 5000 people at SIGGRAPH in Chicago.

M2: Zen VR?

JL: Yes, it was a live improvisation on instruments that exist only in virtual reality. The piece was performed on a single hand with a DataGlove and eyephones. We had smart instuments like "Rhythm Gimbals" (with gyres), Cyberxylo, and Cybersax.

I've also signed with Polygram's Point Records, which was set up for radical new music. We plan to have the first in a series of records out in March or April, tentatively called "The Heart of the Matter."

M2: I understand you were the inspiration for the mad scientist character in *The Lawnmower Man*.

JL: Yes, it was really weird to see a distorted reflection of myself in the movie. Brett Leonard peppered the mad scientist's speech with my all my pet catchphrases.

M2: You've become an icon, like Madonna. How has it affected you?

JL: It's strange having this other person—I'm not sure he's in my charge or not. This public image has nothing to do with me. It's a weird epiphenomenon.

M2: What are the major trends in VR right now?

JL: Higher performance and lower costs. The most exciting development is Sega's "Virtua," which is a VR helmet that's coming to the public next Christmas for under $200. I was involved in the design and a few other ex-VPL people are currently involved.

It's like the Power Glove of eyephones. It will introduce a lot of kids and parents to VR. You'll have a generation of kids growing up with VR. And it will make it easier for experimenters to develop garage VR systems.

VR components are getting a lot better. The latest boxes from Silicon Graphics are very wonderful and the latest head-mounted displays are great. The big hole right now is software and applications. One thing that's very exciting is the Data Superhighway. That can have a tremendous impact on VR. The timing couldn't be better. Just at the time when they're going to build it, VR will be getting a lot cheaper and the combination will help us create shared virtual worlds. M2

HOT HARDWARE AND SOFTWARE

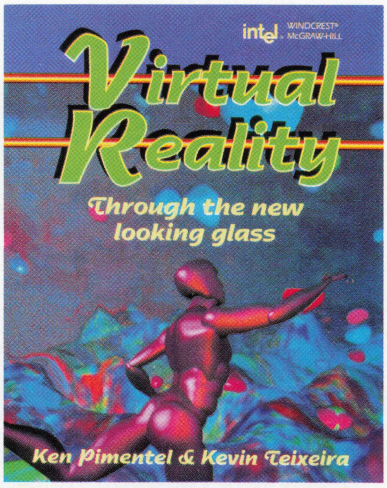
Video 7's new **Fire board**—an i860 RISC graphics board—is hot. Its speed—80 MFLOPS (million floating point operations)—is equivalent to a **Cray 1** and it will make VR on a PC eight times faster than the earlier generation of Intel chips. Sense8 has ported its WorldToolKit to it. Look for an interesting entertainment product using this board in June from a new company called **Visions of Reality**... Sense8 is also talking to **3DO** about porting WorldToolKit to **3DO's** hot new 32-bit consumer edutainment platform—a killer combo. Taking another giant step, Intel's forthcoming **Pentium chip** will empower personal computers to be more affordable VR machines with a sizzling **100 MIPS** performance... Affordable 3D sound at last: the new **Advanced Gravis/Logitech 16-bit sound card** ($130 street price) comes with Bo Gehring's Focal Point algorithms—VR for your ears... On the software front, Chicago-based VREAM, Inc.'s **VREAM** Virtual Reality Development System ($1495, shipping in April, beta selling now) allows non-programmers to create full interactive virtual worlds on an ordinary 386 or 486 PC, including **photorealistic-texture images**. **Run-time systems are also coming for $89** (low-end, for mouse and joystick) and $395 (supports head-mounted displays, etc.). It's **VR for the rest of us**.

VIRTUAL ENCOUNTER GROUPS

VR SIGS are forming around the country. **S.F.**: the Virtual Reality Group (VRG)—contact Linda Jacobson (lindaj@well.sf.ca.us), Peter Rothman (avatarp@well.sf.ca.us), or Timothy Childs (tchilds@well.sf.ca.us). **L.A.**: Southern California VR SIG, Dave Blackburn (breeder@well.sf.ca.us). **Boston**: the BCS VR Group (Paul Matthews, pgm@world.std.com or (508) 921-6846). Also check out Virtual Worlds Society, (800) 354-3659 (founded by Tom Furness and Dr. Joel Orr).

REALTIME VR INFO

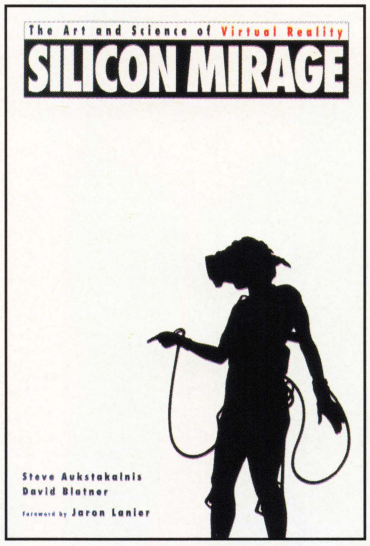
For the latest VR news, log into **CompuServe**'s *Graphics Developers* forum, **The WELL**'s *Virtual Reality* conference, the *VR* conference on **BIX**, and the **Usenet** *sci.virtual-worlds* conference or the new *sci.virtual-worlds.apps*, also available via CompuServe, GEnie, and the WELL (info: bluefire @well.sf.ca.us). Or Call **900-VIRTUAL** for the latest news and info.



EXCELLENT NEW BOOKS

The new *Virtual Reality Sourcebook* lists 350 orgs and products (updated quarterly, $95 from SophisTech, (310) 421-7295). *CyberArts: Exploring Art & Technology* (Linda Jacobson, Miller Freeman, (408) 848-5296) offers the best of the CyberArts conferences, with 53 authors and new full-color scenes from artworks by 21 of today's most creative artist-technologists. *Silicon Mirage* (Steve Aukstakalnis and David Blatner, Peachpit Press, $15, forward by Jaron Lanier) is a lucid overview, focuses on tech, how-to's. Highly recommended. TAB/Intel's *Virtual Reality: Through the New Looking Glass* ($22.95) offers tech details, good history and visuals, thorough resource guide (800) 822-8158.

REAL-WORLD VIRTUAL WORLDS



Who's buying virtual worlds? Automobile manufacturing, aerospace, architecture, casinos, design, financial services, general corporation management, pharmaceuticals, semiconductor, telecommunications, and utilities—based on visits and calls to Seattle-based WORLDESIGN, Inc. (206) 781-5253, says President Bob Jacobson, formerly with the HIT Lab. "Third-quarter 1993 will witness the disclosure of several commercial virtual world applications," he reveals.

CONFERENCES

Multimedia & Virtual Reality, March 1-5, Pan Pacific Hotel, Singapore (65-278-9789, fax: 65-278-1184); Virtual Reality Systems '93, March 15-17, New York City (212) 717-1318, fax: (212) 861-0588; Virtual Reality'93, April 6-7, London (44-071-976 0405, fax: 44-071-976 0506); Virtual Reality '93, May 19-21, San Jose (203) 226-6967, fax: (203) 454-5840; Cyberspace Conference 3, May 14-15, University of Texas, Austin (512) 471-6619 or 3cybercons@bongo.cc.utexas.edu. M+2

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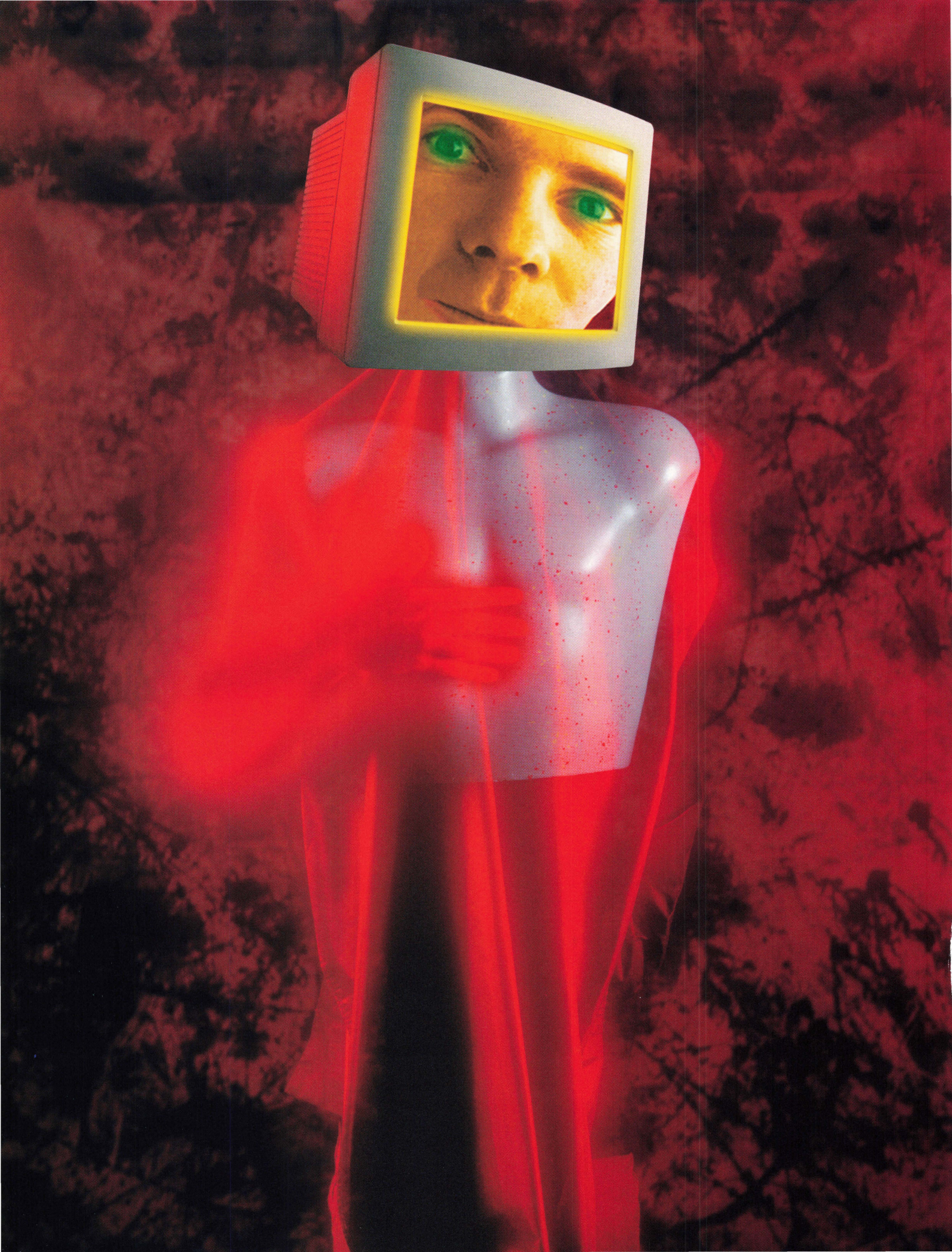
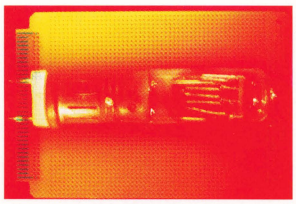




Escaping the Desktrap: Wearables!

Axxter felt his own head go light and vacant... A red light blinked at the center of his vision. A priority call, INTERRUPT status plastered all over it... He blinked to receive. The red light danced apart into words, no voice: THAT'S WHAT YOU GET. And a little symbol... The skull-palette-and-brushes emblem of DeathPix.

—K.W. Jeter, *Farewell Horizontal*

Paco Xander Nathan

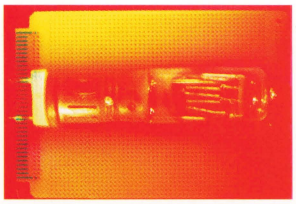
Laptop/notebook/palmtop spearheaded the Incredible Shrinking Computer with all its digital mobility, its wireless networking. However, the metaphor is still Desktop, albeit smaller. Staring at a screen, tapping on a QWERTY, doodling with an input pen—tasks suitable for a suit-assistant, but not for a Mondoid on the run. Nothing like K.W. Jeter's seemingly feasible technovision...

Enter homebrew hack Douglas Platt of Select Tech Inc: "I don't see any reason for having a desktop." Platt backs his words by awesome specs: i386 25MHz, up to 8 Mb RAM, standard PC ports, rugged 120 Mb drive, Private Eye display (3 oz heads-up display, appearing as a full 720x280 screen floating transparently in space), with a battery life of 4 hours. "My present unit is mounted in a fanny pack—weighs about 4 lbs w/batteries." Costs around $3500. The rub is you get to *wear* Platt's system.

Use a computer without having to lock your butt in a chair or fuse both hands to a QWERTY keyboard. A little 7-key, one-handed chord keyboard allows rapid touch-typing (full IBM 101-key emulation by combined key presses), with a 1-hour learning curve for basic letters, numbers, punctuation. Tack on a cellular or wireless modem, and *voilà!* Squidheads can now jack into the Net and still be free to carry luggage, open a door, execute fire & maneuver ops, etc. Platt is also developing novel headset cellular/wireless phones to add hands-free voice: "You can literally be standing in the rain, holding an umbrella, handling a customer service call." *Ou bien, autres choses...*

"Pen-based computer vendors saw wearables as just a niche, a gimmick—but pen-computing doesn't work that well." Indeed, look through adverts for pen computers and try to imagine yourself working (comfortably) in positions those spokesmodels assume. Platt opted for a "chord" keyboard alternative—a problem, right now, because only court stenographers seem to know how to touch-type on chord keyboards, but that's changing... Platt disdains the notion that people won't learn new things: "After the memory training material is completed, I expect to be able to go into a company that pays $10/hr for 60 wpm pro typists... take a crew of janitors and after a week, have them outperform the QWERTY typists."

Bruce Peterson



TIPPING THE HUMANSCALE

After about a month, Platt expects most people to pick up their word chording to around 100 wpm, using just one hand. Platt cites "less mental energy" as well as less physical stress. And with all the brouhaha over RSI and Carpal Tunnel, chording is a hot option.

A major computer firm hired behavioral psych consultant Ron Cruickshank of Optimax to study work productivity in its CAD /CAM labs. He found that people with similar backgrounds and knowledge varied dramatically in performance. Correlating their rates of performance/burnout with a sense of "self-permission"

Doug Platt

The Hip PC

to modify their computing environment. Swiveling a monitor, propping the furniture—physical adaptation of the computer metaphor provided the key to CAD productivity.

Over 25 million U.S. jobs require typing: wearables could free a lot of those people from their desktraps. Millions more work with tools, with physical manipulation. "Working with mass instead of information—these jobs could be expedited by properly designed info systems," sez Platt. "But they're not used because of the implausibility of using QWERTY keyboards while standing, walking, driving."

GUMSHOE GRAPHICS ADAPTER (GGA)

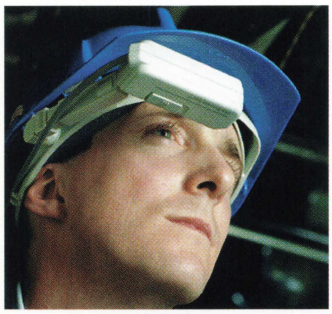
"In 1984 I purchased a strange, handheld computer made by a British company called Microwriter: it had only six keys yet boasted full word-processing capabilities by using chords—key combinations—to create letters, numbers, punctuation, control characters, and everything else you'd want to do with a keyboard." Later, Platt got a Private Eye headband-mounted miniature display from Reflection Technology—"The image appears to be a sharp 12 inch red-on-black display seen from about a foot away."

Perhaps you saw Doug at COMDEX '92 as the "Walking Booth"... "It's a rush to be the only one at a trade show capable of getting info off a name-tag and into a hard drive while standing, holding a plastic bag full of tech lit in one hand AND maintaining eye contact at the same time."

Meanwhile, Select Tech has competition brewing. Rumor has it that HP has a belt-based wearable in the works, while certain Japanese firms, such as NEC, head down similar lines. "We are thinking about personal environment design—architecture for the human environment," sez Hideji Takemasa of NEC's Advanced PC Design Center in Tokyo. Specs for several NEC wearables in development have been released, including portable offices, emergency medic assists, built-in cameras, satellite links, etc. Takemasa-san notes an important design point: "There are no preconceptions as to how they'll look or work." NEC plans to introduce a "Hands-Off" phone module in '93 (to be worn on the wrist) then advance into more sophisticated wearable designs.

HANDS-OFF INFO

During the Summer '91 session at Carnegie Mellon University, a continuing education program for industrial managers spawned one of the most ambitious wearable projects to date. A student design project produced a portable device for reading blueprints—a PC/AT compatible with 3-button input and Private Eye display. Participants built 30



Bill Redic

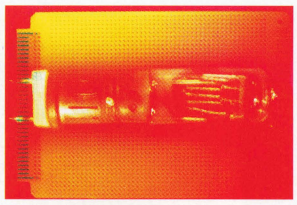
The PC Private Eye

units during the 12-week course by tapping the design expertise of Dr. Daniel Siewiorek in electronics, and Dr. Fritz Printz in manufacturing.

Wearable designs now flourish at CMU, in the Engineering Design Research Center—an NSF-funded project. The philosophical bottom line is that people want hands-off access for information: "That frees up more people, much like PCs freed people by providing electronic spreadsheets," sez Professor Siewiorek. "You want to merge communications space with computer space, to superimpose information on a person's normal environment. This differs from VR because you don't need all those cycles to create the illusion that you're immersed." You already *are* immersed—in the reality of your own life, hopefully.

Vu-Man 1 was a 2.5x5.5x12 inch box, 2 lbs, worn over the shoulder. Vu-Man 2 (out any day) is a 3x3x1 inch box, 0.5 lbs, which clips onto your belt, with a separate 0.5 lbs, 3-button input ("hockey-puck sized") that can go in your coat pocket. Latest models use only 7 chips, including 1Mb EPROM to hold images. They're used to replace Mac-on-a-Kiosk systems for campus info. Imagine a campus tour hosted by a wearable that has position-sensing and links to university info servers. "Some people may not orient well with maps," Dan notes, "So show them pictures of buildings, then give phone numbers, etc., superimposed on the display."

"Imagine CD-ROM manuals, like for car repair... Look at your windshield and the wearable display superimposes an illustration of how to replace a wiper blade correctly." Boeing, one of EDRC's industrial partners, is reviewing wearable designs with similar intent. "Wearables to build wiring harnesses in custom aircraft design—instead of using printed templates, people look directly at the wiring while the system registers spatial info." Bell Atlantic, another industry partner, is developing telecom base stations: "Wearables use cordless links (inexpensive, confined to local area), then



switch to cellular (higher rates) as you move away from campus."

Siewiorek cites time-volatile information as another prime application area for wearables. Another CMU researcher wrote a program to track patterns in a person's meeting schedule, then extract rules to describe usual constraints. A calendar server takes requests for meetings, then negotiates on behalf of attendees using their schedule rules and personal requests entered via wearables. The server transmits/updates individuals' schedules via the wearables, sans phone tag.

Bill Redic

Vu-Man

FROM THE INSIDE OUT

June '93 sets the target date for Vu-Man's follow-up, Navigator, which features speech input, cellular/cordless links to data servers, 60 Mb flash memory, and MACH operating system. "We think we can do realtime continuous speech recognition with a 66 MHz i486."

Check out Navigator's integrated production: "We have a pyramid scheme," sez Prof Siewiorek, "We have wearable applications, wearable computer artifacts, intelligent CAD systems that lead into rapid prototyping, and then rapid manufacturing based on thermal spraying."

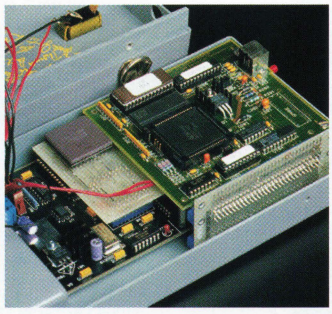
System specs for a wearable configuration (power, memory, speed, etc., like you'd find on the back of a product sheet) get punched into a knowledge-based CAD system (which has been growing for years). The CAD system spits out nodelists, board-level circuit designs: "We can generate a new Vu-Man design in about 10 minutes." Physical design, including PC board layout, goes onto a paper mask and then to a robotic station for thermal spraying. The robot can build an arbitrarily shaped system, wiring and all, without any assembly required: designed and built from the inside out. Arbitrary shape implies system design for body shapes. "I'd like to think of a computer bus on your belt, like velcro, where you slip in modules for display, speech, cellular, etc."

VULCANIZED MIND MELDS

I ran into Select Tech and CMU's Vu-Man project on the Net, in a Netnews discussion group called "alt.cyberspace," appropriately enough, which perpetuates message threads on wearables. For more chord keyboard info, check out Netnews groups "sci.med.occupational" or "comp.human-factors"—watch for monthly FAQ on alternative keyboards.

Wearables offer an extremely fresh counterpoint... Megacorps tout palmtops with handwriting- and voice-recognition as our next step into cyberspace. At the same time, corporate/military research pockets pour gigabucks into total immersion VR. Both strategies promote high-priced yet only partially effective solutions for personal comm in the near future. On the other hand, wearables provide alternate contexts instead of alternate realities. In the words of "alt.cyberspace" regular Geoff Dale, "Most VR is targeted toward immersion, whereas what we want is an overlay effect."

Expect Select Tech to offer kits w/software, or full wearable units in '93. Platt's software will play a major role, to transit wares from desktop/mouse to the chord



Vu-Man inside

focus, so that wearable-based apps "won't lose the flow" as Doug sez. "The purpose of the shareware, TryChorder 1.1, is to popularize chording on the desktop, to teach potential HIP PC(Tm) users how to chord." Target apps for his wearable will be content-based: encyclopedias, public domain books (e.g. Project Gutenberg Library), biofeedback, suggestion software, idea developers: "Software to augment your intelligence, alter your states, etc."

Toward the cyborgs we lust to become.

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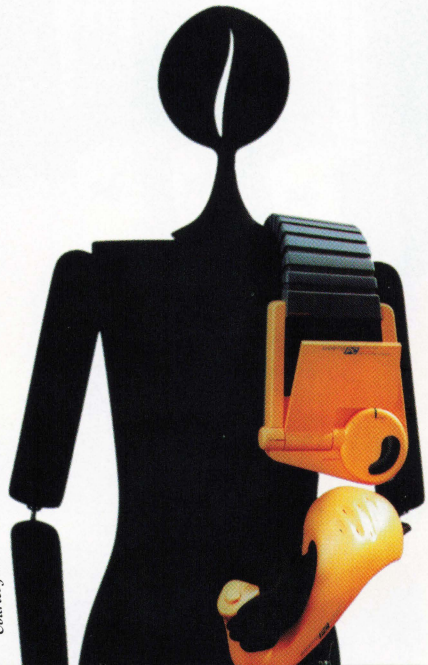
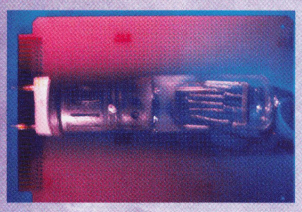
U got k00L tech & wares to report? Ping me:
pacoid@well.sf.ca.us



Courtesy NEC

ACCESS
DENIED



Computer as Furoshiki

Bruce Sterling

"Computer as furoshiki" is a highly speculative vision of the personal computer as it might evolve if freed from certain current material constraints.

The furoshiki is an intimate and ubiquitous accessory to Japanese daily life. It's nothing more than a large square of tough, well-made cloth, usually with a handsome pattern. The furoshiki is used, among other purposes, as a grocery bag, a book-tote, and a decorative wrapper for ceremonial gifts. In its simplicity and multiple uses it is little different from a cowboy's bandanna, except that the skill in wrapping and knotting furoshikis is more arcane.

The computer-as-furoshiki is the computer as a large square of lightweight, flexible cloth. It is not, however, "cloth" as that material is currently understood.

The furoshiki's display screen is formed by thin bands of color-emitting optical fibers, which are wide enough and bright enough to mimic the scan-lines of a video display terminal. These display-fibers are interwoven with other fiber-optics carrying data.

A second kind of fiber is densely interwoven; it consists of room-temperature superconductive wire, possibly a novel form of buckminsterfullerene for strength and flexibility. This highly-charged net of superconductors serves as a literal power-grid.

The third fiber is some currently-unknown form of piezoelectric filament that can contract, relax, and therefore warp and knot itself in response to precise electrical charges deployed along its length.

A fourth form of fiber serves as a radio antenna and communications grid.

One section of the cloth can be radically stiffened to serve as the diaphragm for an audio speaker.

Computation, memory, and movement are carried out by photonic, photoelectronic, and electronic chips composed of custom-built artificial diamond for low cost and strength. If the tensile fibers are composed of organic proteins (which would seem likely), then the computer-as-furoshiki consists mostly of carbon.

The device is operated with voice commands and touch, and possibly gesture, through a similarly woven linked glove.

The computer-as-furoshiki is capable of limited movement. Early versions might fold themselves up like a gentleman's handkerchief; later models would resemble aluminum foil or Saran Wrap. Advanced versions can fly.

Although this computer lacks direct video input, it might be capable of optical character recognition if placed on a page, or of image-scanning if placed on a graphic.

When placed on light-sensitive paper, or film, it generates hard-copies. This computer might displace paper as a medium by usurping not merely the information of paper but the physical properties of paper as well.

When one's head is wrapped completely in the furoshiki, it becomes a virtual reality rig.

When not in use, the furoshiki is worn, as a scarf, tie, turban, or, of course, the Console Cowboy's bandanna. Mainframes can be used as pup-tents, supercomputers or Big Tops, for a late twenty-first-century multimedia circus. M2

Wendi Peterson

Close Encounters of the Fourth Kind:

Abduction

Nick Herbert

How many times, dear
Have you spread yourself open
For some tentacled saucer pilot
On his way to Pleiades City?
(To them Earth is just a backwater truck stop:
Eat at Joe's; hustle the waitresses.)

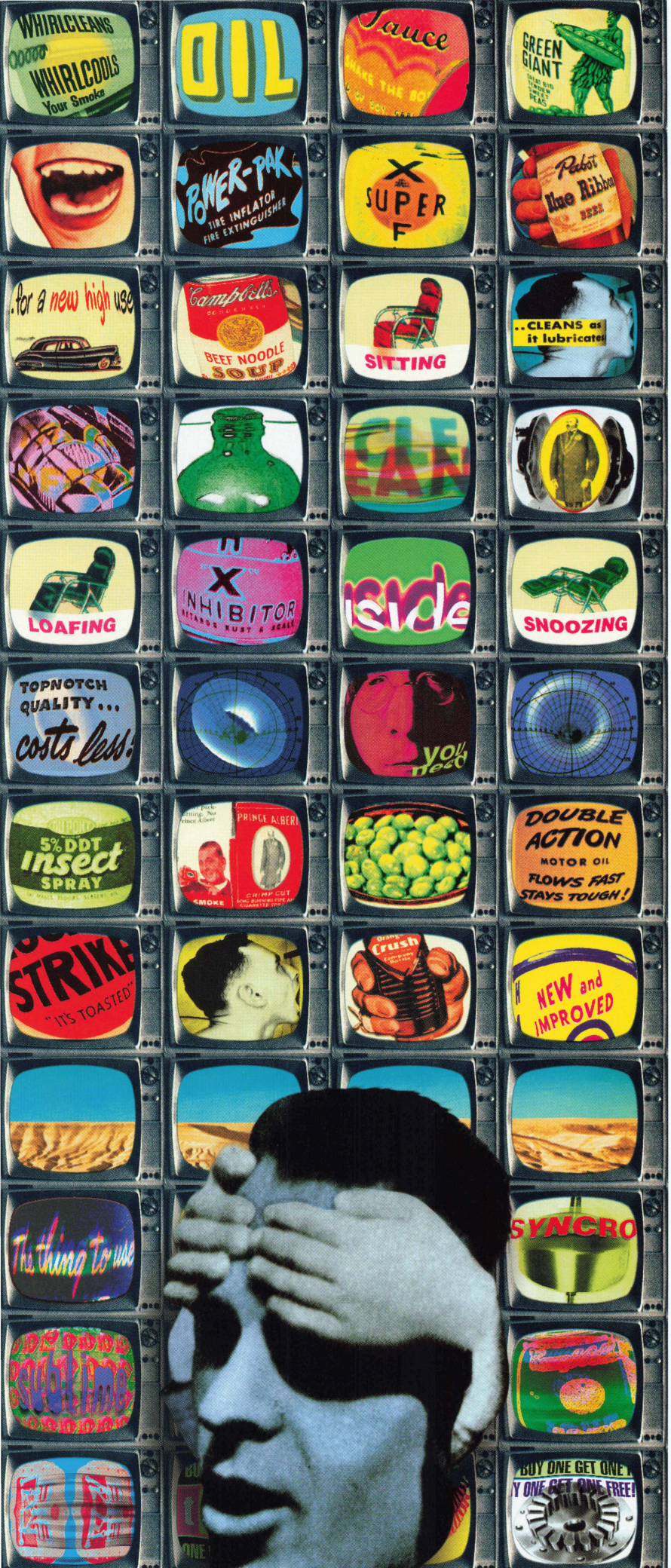
How many times, sweetie
Have you felt
Their baroque genital nozzles
Snaking up inside your body?
(To them Earth is just an intergalactic skid row:
Bad food, illegal drugs and one-night stands.)

On how many hot bowls
Have you feasted, lady
Of their twisted genetic alphabet soup?
(To them earth is just a pit stop
to cool their faster-than-light drives.)

How many times have you dreamt, love
Of bearing his alien babies,
Of happily suckling a litter of starpuppies
On your warm breasts?
(To them Earth is just another empty womb
awaiting the spark of their cosmopolitan seed.)

How many times... ?
O I really don't care.
Tell me, dear
Has it gotten so bad these days
Between men and women
That copulating with aliens
Seems a desirable option? M2

Photo: Jon Gipe/Model: Mona Nigohossian



PIMPING THE

"Angry, disillusioned and media-savvy, the newly discovered twenty-something generation is shaping up as a very hard sell."
—Debra Goldman, *ADWEEK*

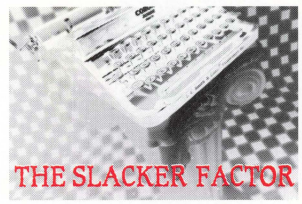
"Belief in advertising is not like breathing. It doesn't come naturally; it must be taught."
—Edwin L. Artzt, Proctor & Gamble CEO

"It's got to be real."
—Levi's 501 jeans advertisement

Andrew Hultkrans

Hard sell, indeed. Did you expect the generation weaned on Watergate, raised on Reagan, and schooled on the S & L bailout to fall for a straight pitch? I mean, *really*, as children we witnessed capitalism's finest hour as our parents happily lined up to buy us our very own "Pet Rocks." We were so goddamn media-savvy that the phrase "The Medium is the Message" has for us the cozy familiarity of a nursery rhyme. Hence, sez Ms. Goldman, we're the ultimate example of the old marketing conundrum that says

John Borruso



REALITY PRINCIPLE

"the more successful marketing is, the faster its object of desire retreats and the harder that object becomes to find, read, and reach." Read these Nikes, Debra.

The Boomers, by contrast, *invented* psychographics and elevated consumerism to a high art form. Luxuriating in their media-reflected self-image, Boomers assume those qualities apply to the elusive GenX market as well. Their Narcissus-like fascination with their own canons of taste and style provided fodder for marketing analysts for over a decade. But now Generation X is proving immune, vaccinated with precocious cynicism. Boomer ad execs are crying in their Chardonnay. *Entrepreneur* magazine vainly reassures them that their targets are *just like them* in at least one respect: "Both groups are looking for authenticity." Boomer ad execs and TV producers are therefore repackaging "authenticity"—"real" products and programs for "real" people. Boomer trendmonger Faith Popcorn (doesn't that say it all?) characterizes the 90's as a decade when the enlightened consumer will "look for what is real, what is honest, what is quality."

Television has cashed in on this craving for the "real": the camcorder revolution has littered the networks with eyewitness "true crime" shows that set new standards for bogosity. For a generation unwilling—or unable—to suspend disbelief, there are now dramatizations, simulations, and faux documentaries to flirt with our jaded sensibilities. "Is it a crotch patch... or is it for real?" is a question that carries a special *frisson* in this age of video voyeurism. A generation anaesthetized to the gory shock value of B splatter films begs to be bludgeoned. Our adolescence welcomed the emergence of the ultimate subgenre of twisted voyeurism—the *Faces of Death* series and underground "snuff" films. A new demand has been placed on "authenticity" by the desensitized organism. Boomer media jockeys have banked on this hunger for true grit with a proliferation of "real life" advertising and programming targeted directly at GenX.

Take Levi's. After years of being squeezed out of the denim market by The Gap, Levi's has bounced back with a mega-campaign aimed at the slack generation. Setting a new benchmark in the unrelatedness of ad to product, the spots offer quickcut images of mostly male twentynothings, clad in denim, sublimely inarticulate and gloriously unemployed. With a jingle celebrating the notion that a product (or lifestyle) has "got to be real" to pass our sophisticated bullshit detectors, the new Levi's 501 jeans campaign (currently saturating MTV) is the first major corporate attempt at "slice-of-life" images of GenXers.

In a related attempt to create "authentic" media images of GenX, this year's *Real World*—an MTV update of the 1950's televised "social experiment" *An American Family* (whose ruinous impact on the monitored Loud family caused father Lance Loud to reflect sadly "Reality isn't what it used to be")—dropped seven Xers into the well-appointed Lower Manhattan petri dish and recorded their interactions. Despite the grand simulation of the whole setup, and the scripted nature of each installment (focusing on one or two participants' problems per show), *Real World*'s veneer of authenticity scored big with the show's target audience. Less grittily real but with a similar strategy, the latest installment of Aaron Spelling's Youth for Racial Cleansing project (begun with the mega-popular *Beverly Hills 90120*), *Melrose Place*

is a L.A. bungalow apartment playground for squeaky clean neo-Reagan youth to go through GenX post-college tribulations without the rough edges, nicotine, or black clothing.

Oppositional voices also aggressively sell the "real" to GenXers, albeit from a dramatically different perspective: gangsta rappers of the South Central school wage "authenticity" wars against one another. Justifying the raw scenarios of 1989's seminal *Straight Outta Compton*, Eazy-E of N.W.A. called gangsta rap street-level reportage on the trials of inner city life, or "kicking reality." Two years later, however, in the wake of countless imitators, N.W.A. released the musically powerful but lyrically insecure *Efil4zaggin*—its entire first side a defensive reassurance of the group's "street" credibility.

With songs like "Real Niggaz," "Niggaz 4 Life," and "Real Niggaz Don't Die," the listener is battered repeatedly with reminders that N.W.A. are "real niggaz" and that the recorded product in hand is an "authentic" document of the perils of the 'hood. "False niggaz," "House niggaz" and other inauthentic sellouts are dissed with venom usually reserved for the LAPD and other manifestations of white authority. What may have passed with *Straight Outta Compton* is revealed as simulation by the curious defensiveness of *Efil4zaggin*. Behind the gangsta posturing we find that Eazy-E was the only member of the group to have ever been an active gangbanger; Dr. Dre and DJ Yella wore makeup and Prince-esque frills in their mid-80's group The World Class Wrecking Cru; and Ice Cube—with whom the group has been jockeying for authenticity—attended technical college in Tucson, Arizona. Although Ice Cube, as a matter of principle, still maintains a residence in South Central L.A., the other members of N.W.A. allegedly moved to the affluent precincts of Riverside. No matter though, for despite our wariness of Establishment marketing, GenXers gladly suspend disbelief for the voice of the Other—making *Efil4zaggin* #1 on the *Billboard* charts within its first week of release, with no radio airplay.

IT'S THE HYPERREAL THING

Frederic Jameson calls postmodernism "the cultural logic of late capitalism," and given the economic signals of the past year, it may be *too late* for capitalism, period. Yet the stewards of its rhetoric—advertising execs and their braintrust—have, in many cases, adopted a more sophisticated self-referential strategy that verges on the parodic. The ad industry's late-breaking comprehension of the pomo condition has led to its inevitable end: the deconstruction of artifice and the emergence of a long-buried truth—*the commodity is the only real thing in this society of simulacra.*

From the Coca-Cola Company, the original purveyors of "the Real Thing," the new Sprite ad with MacCaulay Culkin exemplifies this wink, wink "Hey, we know" strategy. In the TV ad, chicken porn refugee Culkin sits in front of a house with his prepube paramour, who is leaning over to kiss him. With a "silly rabbit" smile, he reveals "I'm not really your boyfriend, I'm an actor. And this house isn't real, it's a set." He pushes over the facade, revealing a cluttered soundstage. Persisting in the deconstruction, Culkin says "And these aren't your parents, they're just extras" as the girl's "parents" are shown at their backstage makeup mirrors. He offers her a Sprite from a conveniently placed cooler as consolation for her punctured reality. "The only things that aren't fake are you, me, and Sprite," he says comfortingly. Then, in a final sinister twist that confirms the primacy of advertising, the girl morphs into a cardboard simulation and is whisked away by a stagehand, leaving the sempiternal Sprite as the only remnant of reality.

There may still be hope. As pomo Jeremiad slanger Jean Baudrillard maintains in his otherwise bleak vision of a society that has lost all connection to the "real," "Irony preserves what little reality the world has." And, as we all know, irony is the Xer's true birthright.

I'd like to give a shout out to all the folx in the Generation X Conference on The WELL, hosted by your friendly neighborhood irony mongers Jeffrey Mcmanus and Cynsa "heh" Bonorris. Type "go genx" at the OK prompt (genx@well.sf.ca.us). Thanks to Adbusters *magazine for the tasty Proctor & Gamble CEO quote. Sporadically published but perfect fare for Mondoids,* Adbusters *deconstructs images and slogans and delightfully skewers the American advertising machine.*

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"... a trendfest of ideological mylar"

—the Village Voice

Photoimage by Jill Greenberg Model Daniela with Company Model Managment, NYC

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Some Thing

to Watch Over You

The Surveillance Art of Julia Scher

It's always startling when the meat persona so little matches the modem persona. On the phone and in faxes Julia Scher is a technological feral child who's been hauled kicking and screaming into English, a performance artist who recently surveilled the city of Buffalo. What she calls her "word salad" is a sex-fear phantasmagoria of technophilia and technophobia all at once. In person though she looks like the class-one certified security installer that she is, perfectly able to blend in with the industry men at the security and surveillance trade shows she frequents. Based in Cologne, she runs a company called Safe & Secure. We finally met, of all places, at the Marxist Literary Group cashbar at the Modern Language Association Convention in New York this past December.

I first got to know her work when Jim Pomeroy pronounced her one of the foremost contemporary techno-artists in his essay for Technoculture, *a book I edited with Andrew Ross. I've been tracking her work ever since, and was delighted when St. Jude called to announce that I was the absolutely perfect person to interview Julia Scher and somehow convinced me to drop everything. In any case, I loved doing the interview and the special bonus of the tattoo designs Scher faxed to me while working on her responses, even if they were pretty scary.*

—Constance Penley

Constance Penley

Joseph Cultice

MONDO 2000: A group of anthropologists has recently banded together under the rubric "cyborg anthropology" to study the way people respond to and interact with the new cultures of science and technology. Aren't you a kind of cyborg anthropologist in your investigation of what you call "Information America?"

JULIA SCHER: I hope so. In terms of my work creating a discourse that cuts across previously separate disciplinary boundaries like science, law enforcement, art, engineering, traffic control, feeding, tending, and sex servicing. Information America crowds together jobs, machines, ideas, spaces and technologies in a bricolage. I've been constructing these descriptions of merging cultural practices—previously separate ones like the hate industries and the security industries—that don't explicitly share identical manifestos but share the same jumbo data bases. Rather than building a large constituency base, they use their computers to troll for information and harvest bodies. Actually "Information America" is a title stolen from a real computer program of specialized lists that you can buy of people all across America [*covered in* MONDO #8]. In one of its now defunct forms (privacy advocates made the creators move on), it was an easy to use data-scavenger-at-your-fingertips.

M2: One of the things that's most powerful and effective about your work is that it doesn't just "demystify" surveillance technologies, it also chillingly implicates the observer in a world where one constantly watches and is watched.

JS: It's like in television, these installations offer observers the promise of invisible capturing capabilities. Any watching or controlling position is acceptable—bird of prey or impassive patriarchal observer, Central Scrutinizer or just a B&D misfit nerd sucking some hose.

There's this TV justice show with an upbeat musical voice suggesting that viewers inform on society-devouring criminals. All you have to do is *watch* the society devourer and then dial a toll-free number. It's all done by computer. You give your information by pressing buttons on your touchtone phone and the computer gives you a number back. The TV show claims that many of its successful hunts were accomplished by observant viewers who released some vital, juicy bit.

M2: A friend who studies the literature and culture of what used to be East Germany visited there shortly after the wall came down. He found that many of the East Germans were distressed to realize that they *missed* the system of everyday surveillance under the regime of the Stasi. Rather than being happy and relieved that they no longer had to worry about which neighbor, friend or family member might be spying on them, they felt depressed because now no one was looking out for them and no one thought that what they were doing was important enough to report on. The breakup of the surveillance system thus brought the disintegration of what had become the very fabric of social life. What about this other side of surveillance?

JS: Surveillance can fulfill a huge psycho-social mandate. With the interactions under the old surveillance, the watcher-watched rhythms, and the sense of importance that comes with them, citizens can feel that they're "it." It's like the kind of sharing that goes on in rock music. The ultimate in music for me is to participate, to dance. So it could be the case that if everyone is conjuring the same activities—participatory monitoring—it could offer a strange empowerment.

I can see how removing an aggregate system that controls not just physical space but unconscious space, could produce such a qualitative change in the monitoring of people that they could feel exposed. But even now the government is filling that void with designer-control products from the democratic West.

Julia Sher "Securité Par Julia"

M2: You do know, don't you, that your account of subjectivity is entirely Lacanian. You're not just a cyborg anthropologist, you're also a cyborg psychoanalyst.

JS: Oh?

M2: What I mean by Lacanian is that your surveilled subject is, like Lacan's subject, "photo-graphed in the field of the Other." Identity comes from the outside, through recognizing one's self in and as an image, and through being recognized by an Other. Of course this process leads to an entirely narcissistic, aggressive, and paranoid subject, but that was Lacan's point. The reason I'm dragging in Lacan here is that his explanation meshes nicely with your own attempt, in your art, to understand why people need surveillance and also why it makes them crazy.

JS: Surveillance has been in use since ancient times, with moms watching out for kids at the mouth of the cave. The monitoring, protection, and security industries have grown up delivering this "protect and serve" ideology. But their practices often interfere with civil liberties, privacy, and take away our power of self-representation. What might make us crazy is that we can't really control the people that digest our lives, and we know it.

My work builds surveillance narratives around this sector of cybersoup. People enter into a space and roam around as a surveilled subject. As they begin to police and patrol, their relative position and identity shifts as they watch monitor screens electronically metering and overlaying their images with manipulative and misidentifying texts. They can interrupt the system momentarily by turning away from the site-lines of cameras, changing the computer program, disabling the monitors. The roles of watcher and watched become interchangeable as everyone shifts around. Watching and reseeing yourself in the switching monitor fields represents the moment of breaking through the restricted world hierarchy—seeing everyone in all positions.

One sublimed mirrors-for-subjects category that cheerleads the hierarchical architecture is this technoprovocation of swishing around surveilled subjects for voyeuristic pleasure. Pussy Galore Snoop Sets, heat-activated mirrors on sticks, hidden cameras, consumer video equipment and inexpensive phone taps are marketed as fast ways to experience what was once private, socially unacceptable, or restricted to professionals and the very rich.

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strapped into one of their libidinally attractive boat rides, to visit, for example, a land inhabited by hundreds of mechanical singing prepubescent girls.

M2: Another powerful aspect of your work is the way it acknowledges ambivalence and contradiction in our technocultural lives. Your work investigates and criticizes the rapid expansion of monitoring, security and surveillance systems—their pervasiveness in everyday life—but at the same time you make your living installing security systems for women, through your company Safe & Secure. Talk about this ambivalence or contradiction and how you live it.

JS: Oh wow...

M2: To bring it home, so to speak: do you wonder whether a client's choosing to have you install a security system ends up making her feel more terrorized, more paranoid? As it says on a screen in one of your installations [*Buffalo under Surveillance*], "Attention Girls! You have been found faking control and will now be punished." Here's the contradiction in your work, the essential paradox: you install security systems for women even though your artwork aims to demonstrate that security and control are dangerous delusions and that surveillance can always be turned back on you. Are the security systems that you install meant to make women secure or teach them this lesson?

JS: My security systems do make people more paranoid if they're already paranoid. For others it just allows them to make adjustments to an increasingly threatening world. It also makes them feel more secure. But part of my work is sharing with them the risks and dangers of these systems, especially when they're used to support economic and political agendas with which we don't always agree.

My Safe & Secure accounts and my art installations examine intrusion—creating and deflecting it. If I'm securing a discrete apartment, usually the first goal is to deflect potential intrusions and then to signal some alert. In a gallery installation my first task is to gently suck you in and let you get used to the space. Then the electronic threats and dangers are perceived, and then you get nailed. These are two different dollops of social control but they both demonstrate the language.

Julia Sher "Occupational Placement"

The only ideological conflicts I've had were on two occasions, where I laced installations with ultra-contradictory positions. One buyer in particular took me at my word about uncovering the ferocity within these machines, and took his piece to a really hot extreme. It was interesting fieldwork, but I'd have to say that I'm glad that there were some limits on this project—like I'm glad that this guy doesn't run the country.

Contradictions are part of our future; I'm trying to highlight them. Right now I'm investigating the electronic salvation movement and predictive engineering. This movement involves a heavy initiation

period for all of the people of the world, then control through a finely woven electronic architecture.

M2: You say that the only available positions in the modern panoptic world are prisoner, guard, and voyeur. Does this suggest a purely dystopian vision of social agency or do you think that these are positions that can be played with, refunctioned, or reoriented toward the end of greater social agency for those who are not the owners of the means of surveillance?

JS: I hate to sound like a cloud of doom, but I find that people tend to slip back into the tacit bonds of fear, threat, and self-restraint. In the *topos* of our culture there's a quasi-tilt toward the controlling power of our current system. I'd like to think that the diseased and abnormal architectures were all floated away with the Revolution but they weren't.

M2: The texts displayed in your work, lines taken from surveillance manuals, biomedical texts, and police reports evoke a world of control and surveillance that is fully sexualized and always about power and its abuses. If I can characterize the psychosexual imaginary of the spaces you construct in your installations, I'd say it's that of the murderous womb, of maternal comfort that turns into child sexual abuse. What are the consequences of metaphorizing our modern technocultural world as a devouring, abusive mother? How does this differ from the cultural tendency to conflate technology out of control with women out of control?

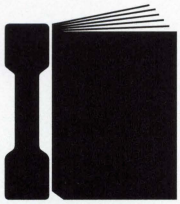
JS: Like a mother, surveillance accommodates everyone, then selects. I have a faint memory of Zappa's Mothers of Invention where, at some point (was it in *200 Motels*?), men were impersonating a motley crew of "Mother Fuckers" going down the road of some technomusic hell. This was a high moment for the idea of mom as eatery. And they put on top of this a joke about men occupying the town, Centerville. But this picture is not so much a joke, and the action of men—or is it technology cross-dressed as men?—have occupied everything, even this mother space, this center.

I'm just taking this space. I try to simulate a space that is threatening by using sleek mechanisms of dominance, where you are vulnerable but you don't even know exactly how it's a dangerous space. We are born into the arms of technology, which are supposed to take care of us, the same way we are midwifed into life and a mother's protection. But neither technology nor mothers always take care of us. There are dangers we experience but can't articulate. I want to make them palpable. I want to try to register the horror in words, to bring it closer to the surface, to lift the dead weight of repression. I want people to be able to figure something out for themselves through learning something about the fallibility of the apparatus, so that they can invent ways to keep seeing with new perspectives.

I was supersurveilled as a child but would have benefited from security cameras in the room where I grew up. Those cameras could have dug up my stenchy surveyors, and taken their heads out for a breather.

M2: When will your T-shirt go on sale, the one you designed to look like a straitjacket?

JS: In March. M2



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Naked Lunch?
JK

SUSIE BRIGHT TALKS WITH LYDIA LUNCH
WITH AN INTRODUCTION BY KATHY ACKER

INTRODUCTION TO THE NEW WORLD

Despite the intrinsic fascination of the interview you are about to read, I am no longer interested in the human point-of-view. I am only interested in rats, in rats' eyes.

RAT as in PI-RAT.

Perhaps due to our pride in our "goodness," we humans are about to go under permanently, red and dead, whereas rats are not only surviving, they're taking over, continually learning, and they're retaining their curiosity.

Rats are our future explorers. Rats and their pals, the viruses.

Well, what the fuck. Except, as regards me personally, I'm not ready to die and, more than that, I'M NOT GOING TO STOP GETTING LAID AND CEASE HAVING ADVENTURES.

In other words: now it's time to learn rat perspective. Whereas humans or wimps seem to be choosing to do themselves in, rats, if they must go out, scream, fight worse than vampires, and the rats who are left after their deaths learn from mistakes and histories of their ancestors.

So here are some rat stories which explain who Susie Bright and Lydia Lunch *really* are:

PIRATES

In the days when humans were without computers, a few pirates were ravaging all the other humans who ventured out on the raging seas. Ravaging for years and almost never caught; for instance, Captain Roberts, who was black, plus gang appropriated over four hundred ships before he was shot to death in a battle.

These pirates knew all the watery passageways, the watchit blue roads, the inky lagoons, where booty would be waiting for them. They knew exactly where each government was sending a ship and what kind of ship; they knew all the weathers. For pirates had to be wilier, cannier, ballsier than those who lived legally. For if they failed to plunder successfully, they were captured; when captured, killed (or worse, castrated). But if they took a rest from the constant danger in which they lived, if they stopped their stealing and raping, the pirates starved.

In the early part of the eighteenth century, Captain Edward Teach, better known as Blackbeard, who had been born in Bristol, England, married a sixteen-year-old girl. He was just about to commence the major portion of his pirating life. She was his fourteenth wife.

At this time most of the other wives were still alive.

Welcome to a world, our world, inhabited by men.

While his sloop lay in Ocracoke Inlet above the Jamaicas, Blackbeard rested on shore in the plantation which his wife was currently inhabiting. That night, as was the pirate's custom, he welcomed to the new home the five or six pirate companions whom he had invited to fuck his new bride.

Scene three: Captain Teach robbed three English vessels of all their possessions, left them alone, Bermuda-way, then captured two French vessels burdened down by cocoa and sugar, and after relieving them of their cargo, amused himself by playing with the wives of local North Carolina planters. Wife-playing or -swapping had nothing to do with the decision of the Lieutenant Governor and Commander-in-Chief of the Colony and Dominion of Virginia to send his First Lieutenant Maynard and goon squad after the pirate. Lieutenant Maynard sliced off Blackbeard's head, hung the rest of his body off the pirate bowsprit, and abandoned ship. Several of Maynard's men, after they had conquered the pirates, turned to piracy themselves.

"In the Commonwealth of Pyrates, he who goes the greatest Length of Wickedness, is looked up to with a kind of Envy amongst them, as a Person of a more extraordinary Gallantry,... and if such a one has but Courage, he must certainly be a great Man... "Come,"... (says this Heroe), "let us make a Hell of (our) own, and try how long we can bear it." —Daniel Defoe in his *A General History of the Pyrates*.

Into this world painted in every color, enter women who will no longer let themselves be regarded as possessions. In the realm of patriarchy, all victims of rape are victims of incest.

In England, Mary Read's mother brought her daughter up to be a boy.

When Mary turned thirteen, her mother apprenticed her out as a foot-boy to a French lady. Like many boys of her class, Mary

Photographs by J. K. Potter

ran to sea in order to find freedom. First, she worked a man o' war, then turned to land and the army, after many adventures, found herself on a vessel bound for the West Indies.

English pirates captured the ship. Mary remained with these pirates, with them was pardoned by the King's Proclamation for the crime of piracy; then she set sail on another ship, as a privateer. Again, turned pirate.

There was another woman, dressed in male drag aboard the pirate ship. Anne Bonny was the name and she fell headlong in love with Read. So she showed Read that she was really a girl. Read showed her the same thing.

Captain Rackham, the head pirate, because he was Anne Bonny's lover, threatened to kill Mary Read. Mary Read hastily revealed to him that she was female and they all became lovers.

For some time the three of them kept this secret and pirating continued. Then, love overturned all security and society as love does. When the pirates captured a ship, it was their own custom to persuade the artists who inhabited the ship to remain with them, to turn pirate. Mary Read fell in true love with one of the artists. Against all reason or against her reason, she would do anything for him and did and so she showed him she was female by placing his lips on top of her blood-red nipples. The artist and Mary became friends and friendship became passion.

Since she could not live without him, she considered herself married. Mary was pregnant with their child when she died in prison.

I don't know whether the interview which you are about to read indicates that Susie Bright and Lydia Lunch are rats. Pirates. I know that they are. I know that they have nipples that shine in the dark and spurt out the bourbon that's thicker than any sperm, that's more poisonous than the lily-white-liver-juice of Jessie Helms...

—Kathy Acker

It's a fucking crime how culturally ignorant this country is

WAY DOWN YONDER IN NEW ORLEANS

SUSIE BRIGHT: What are you doing in New Orleans?

LYDIA LUNCH: I'm living here. I've always had periods of isolation and then jump back in to the throng. I've always taken months or years to live somewhere other than New York, and to do other things... concentrate on writing, which is a more solitary thing. That's actually what I prefer. I can't stand having people crawling up my ass. I mean that as a public figure and as a woman.

Places like New York, San Francisco, Chicago, Detroit, Los Angeles... people are crawling up your ass
A) because you're a white female,
B) because you're a freak,
C) because they might think they know something about you or what you've done... *wrong*.

And down here you don't get any of that. You just don't get hawked. Me, I'm tired of being hawked. I'll do the hawking, if you don't mind. It's a good place for me to live. It's very boring, I guess, to the average person. But I live in my own world, and I never find that very boring.

SB: The New Orleans love nest...

LL: Living in a city like this, because it's intrinsically lazy... I mean, it's so hot half the time you have no choice, it makes you think different things and in different ways. There's a chronic neurotic/psychotic energy to New Orleans that's *so* sneaky. It's a very *luxurious* vibe.

GIRLS JUST WANNA HAVE FUN RAPING, KILLING & FUCKING

LL: I just turned in the proofs of my book, *Incriminating Evidence*, which is being published by Last Gasp. I started writing some of this five years ago. One section kind of terrifies me. It's made up pretty much of all of my political speeches. I realized that it's the most antagonistic diatribe against the American government that I've ever seen! *Treason* is an understatement.

And it's true, every last word, I'm sorry to say. Very ugly. And it hasn't changed in the last eight years... eighty years, 100 years, 2,000 years. That's how long male rule has been going on after 200,000 years of the rule of the goddess. The longest period of peace in known history was in Crete under female matriarchy for 1,000 years.

SB: So do you just chalk it up to human nature or the nature of the gender?

LL: One way I like to look at it is nature's way of population control. But the problem is Mother Nature can't be expected to do it herself all the time. She has the earthquakes, tornadoes, floods, mud slides, drought, famine, cancer, cholera, tuberculosis, and AIDS; yet zero population growth still hasn't been achieved. This is a problem. And this is why I feel it necessary to speak out under the banner of the conspiracy of women. We too can have a little bit of fun raping, pillaging, killing, fucking and destroying other countries, continents, planets. It's time for us to get in on a little bit of fun.

I'm always ironically, sarcastically, humorously, or factually proposing eye for eye, tooth for tooth, fight violence with violence, because you can't fight war with peace. Is that philosophical, is it political, or is it just performance art?

WHERE DID ALL THE EXTREME EXTREMISTS GO?

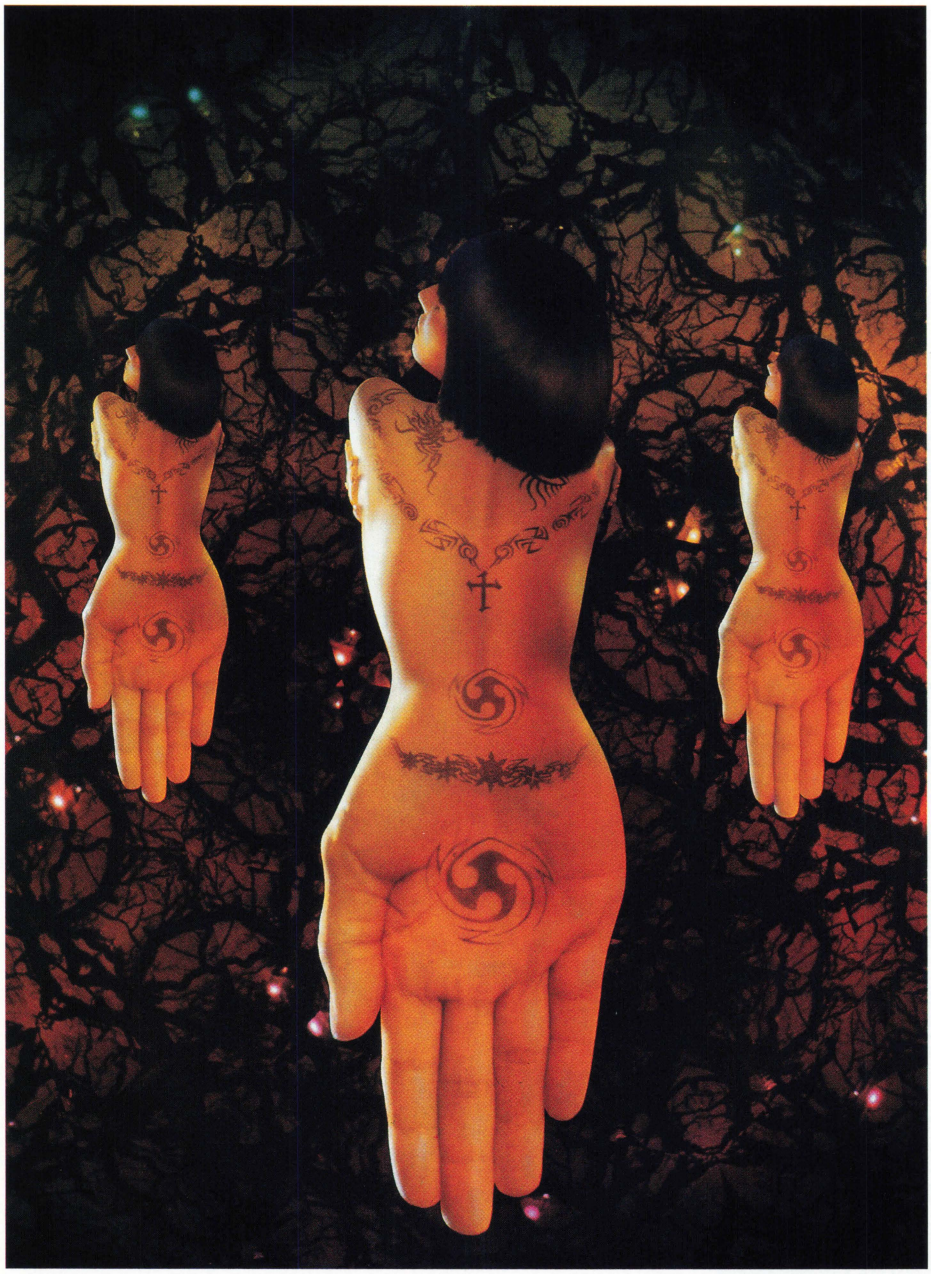
SB: People associate you with the punk rock/performance art counterculture of the seventies. And now hip-hop is the happening music scene, and these decades have gone by and there's been all these changes. I wondered if you feel like grandma sometimes? Do you still feel closer to the kinds of people and artistic ideas that were happening when you first started becoming well-known, or do you feel like that was then... this is now?

LL: I don't feel locked into any genre or culture. I try to keep my ears and eyes open and at least taste what's going on. But, as far as I'm concerned, Alternative is more mainstream than it was in the seventies and eighties. And it's sad and disappointing because rap is a more radical form. Rap is the punk of the 90's, and it's more honest and advanced... but too repetitive. Everything, no matter what it is, is only going so far. Boundaries were expanded more in the seventies, because people were more scattershot, going in all directions at once.

It's really hard to find the gems. There aren't enough *extreme* extremists. I don't know why. The extremists seem to be in rap, like Sister Souljah, Ice-T, N.W.A....

SB: Who are some gems that you've discovered lately, not just in music...

LL: One of my favorite writers is



Juan Goytisolo. He's not very well known in this country, but in England he's fairly popular.

SB: What kind of name is that?

LL: Spanish. He's put out in English on Serpent's Tail Press. It's available in this country. City Lights has his books. He's a writer that was exiled under Franco, and wrote about six or seven books, which are just rants. They're political, they're sexual; a lot of them don't have very much punctuation... paragraph after paragraph of very beautiful, poetic and furious anti-Franco, anti-Spanish, anti-Catholic, anti-heterosexual ramblings. Grove Press put out his autobiography, *Realms of Strife*, last year about his struggles under Franco, and the political magazines he put out in the fifties, and his exile to Paris—hanging out with Genet and Sartre.

SB: Is he alive?

LL: Yes, he's alive. This country gives you so little information about any artists in Europe or Spain or South America, whereas those countries know everything about what's going on in America. It's a fucking crime how culturally ignorant this country is.

WILD KINKY SEX EVERY NIGHT WITH HUNDREDS OF PEOPLE

SB: Do you look at any commercial porn these days?

LL: Not really. I find I don't usually like the models they use. It seems very plastic. It doesn't really turn me on. I like the *idea* of it more. And I always like to know about what new stuff is out there.

SB: Your sexually explicit film performances are basically horrific.

LL: The ugly side. Nobody wants to talk about that.

SB: Did you ever want to do a sexually explicit film role that would be arousing rather than horrific?

LL: It would depend on the story. There's enough women longing to be desired and desirable, playing that kind of trip. I don't really find it necessary to show that element when everybody else is trying so hard to be the fucking sex goddess and sell their sex. But it depends on what the point would be. I'm not *against* it. It's just that what I'm dealing with is the reality of certain kinds of obsessions that aren't pretty. Why tidy them up? That doesn't mean they shouldn't be documented. I'm not trying to turn people on with these films. I'm trying to express certain obsessions that men and women have.

SB: Do you live by yourself, or with a lover, or with friends?

LL: I'd rather not answer that.

SB: *Be* mysterious. This is something I've decided to do more myself... I mean, with my public image, people imagine that I'm having wild, kinky sex every night with hundreds of people...

LL: The ideal scenario, in other words..

SB: ...and that I'm very dominant in my sexual encounters. Just this glorious black-leathered femme top. And I laugh a lot at that image because it's very different from how I dress, how I look, how I act sexually. And I've also gotten very private about certain aspects of my life, because it can be really cruel when you hear strangers gossiping about you. Or it actually gets into print, or you realize you're being

followed as you walk into the grocery store. I go back and forth between wanting to educate the public, and then part of me wants to say, "Screw educating you or letting you know the real thing. I'm going to be Greta Garbo and you'll just never know." So I wonder how you deal with public/private image.

LL: That's why I'm living in New Orleans. I don't know anyone down here, which is fantastic. I lead a very private life. I never go to bars. You will find me in my house doing my private rituals and enjoying a very intimate life. And I'd like to keep it intimate.

SB: So you're not so interested in educating your...

LL: It's none of their goddamn business! First of all, they're gonna pick up on what they want to pick up on, because they want to use you as their fantasy. So what are they doing in their lives? Why aren't they out doing it instead of talking about me doing it? Whether or *not* I do it.

Also, with my aggressiveness and fury with the spoken word, people are going to make ridiculous assumptions based on a simple perception of my attitude about sex. You only get to explain it like *this*, in an interview. You're not going to go out and change their minds personally. They don't *pay* me enough to go door to door.

SB: Are you doing any sexually oriented work while you're in New Orleans?

LL: Not exactly. I've been taking a lot of photographs with this character, J. K. Potter. I'm very interested in photography. I've been taking photographs in black and white.

SB : Why is he a character?

LL: He does montages of men's and women's bodies onto parts of animals; ghosts; ectoplasms. You have to see his work. In fact I hope that he's illustrating this article for MONDO. [*He is.—ed.*] He's taken photos of my back that have turned into a human hand. Very beautiful, very freakish, very erotic photographs. And I've been doing a series of photos with him. I like photographs. Since I've been down here I've developed a portfolio of black and white photographs of teenagers in various locations. Showing their ennui or their longing or their frustrations.

SB: You're turning into a dirty old lady.

LL: It's strange, but I've felt this way since I was about 13. But I'm not dealing with filth. I'm dealing with energy. People have to understand that's what sexuality is about. That's where people get confused. They want to reduce it to filth, flesh, blood and smells. And they want to forget what the essence of it is. And that's the power and the pleasure and the energy. And they never talk about that. Are they all that ignorant?

SB: I was just given a gift of a Jock Sturges book, with all these photographs of teenagers. My friend inscribed it to me, saying, "There. You see? The FBI is right for once, but no one can talk about it." She was teasing me, because it *is* shocking to see young people going through puberty, to see them nude. You're utterly unaccustomed to it. And the power of their bodies and their emergence...

LL: ...and their beauty...

SB: ...is so overwhelming it can make you cry, just opening a random page.

LL: It's uncorrupted. Dirty minds make things like that dirty. They can't see the beauty. They can't see the energy. And in this country people equate sex with negativity. It's *so* prehistoric. The incredible, flagrant disregard for pleasure, sexuality, and for equality in sexuality. What they've made sex into in this country is disgusting... homicidal. It sells everything but pleasure.

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Zoning Out, Temporarily

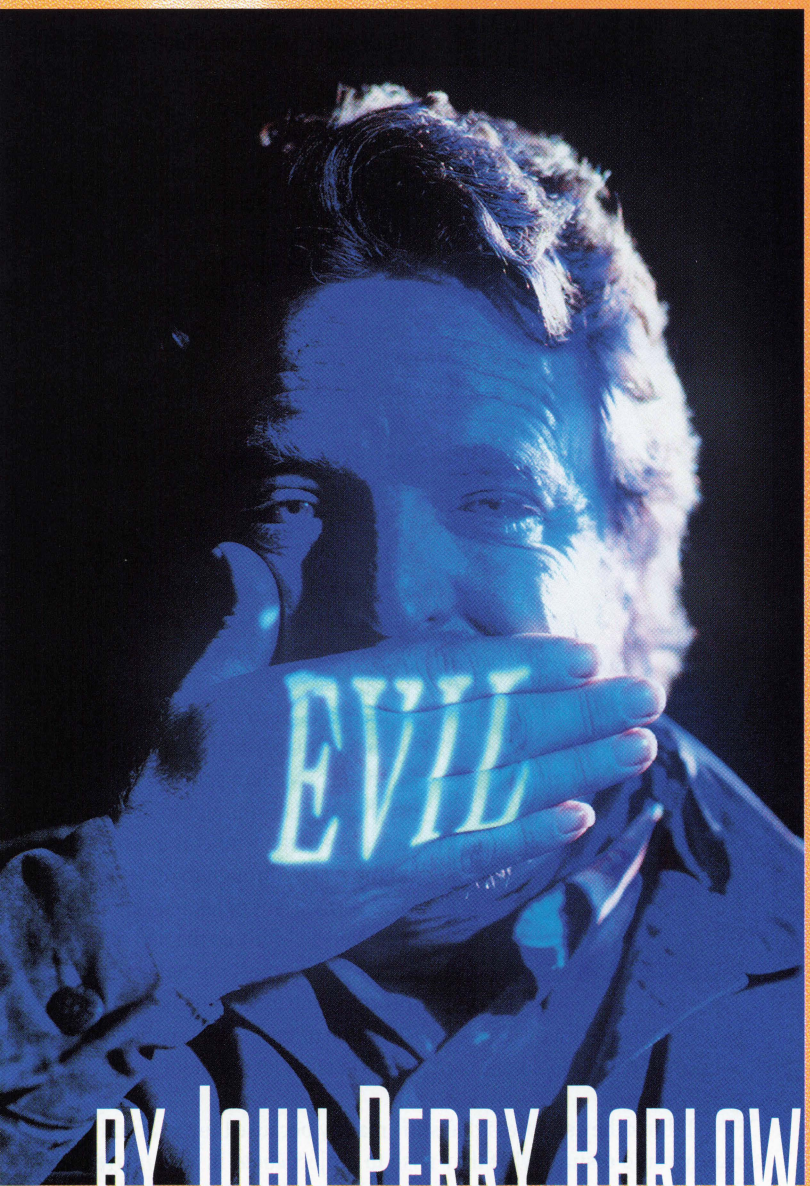
with Hakim Bey & Genesis P-Orridge

It was Queen Mu who made this happen—her conspiratorial whisper suggesting that I get myself together with Hakim Bey, Genesis P-Orridge, and a MONDO *tape recorder. I wasn't too sure what she had in mind.*

I mean, aside from the fact that all three of us are white, male, acid-altered, old enough to know better, and crazy enough to do it anyway… Our résumés just didn't hook up and I wondered if we would.

Mr. Orridge, for example, is one singular fellow. He's got hardware dangling all over a body which sports more ritual scars and tattoos than Melville's Queequeg (with whom he shares other characteristics, most notably a nightmarish appearance cloaking a sweet and reasonable mind). He also happens to be the father of modern primitivism, the post-industrial tribes, the Rave Movement, the avant-garde band Psychic TV, and a couple of beautiful young daughters.

Orridge has been willfully causing such grave offense to British propriety for the last twenty years that they've finally seen no alternative but to seize all his works and archives and pass laws which, though tailored to outlaw him, also make it a crime to give any other British subject so much as a hickey. (Or cause any physical harm to oneself or another consenting adult in the pursuit of dark pleasures.)



BY JOHN PERRY BARLOW

PHOTOILLUSTRATIONS BY JILL GREENBERG

Finally, agents of the Crown have sent him packing into exile in California—a place so much more congenial to abominations that Mr. Orridge is having to scratch around for something to sink his sharpened teeth into.

Hakim Bey is another whose deviances have forced him to hide behind another name. Spending much of his life disguised as a mild-mannered comparative religion scholar, he emerges in print as an anarcho-gay drug fiend and Sufi pirate, compared to whom Salman Rushdie is as orthodox as an ayatollah. Hakim's the guy who put the Temporary Autonomous Zone on the map.

However similar they might seem in their jointly unspeakable practices, their unabashedly unnatural acts, Bey and Orridge are quite different. Bey is reclusive and ascetic, a closeted natural philosopher, whereas Orridge is a performer, indeed something of a rock star.

And there's my own staid self, known to MONDO *readers as a retired cattle rancher, a rural gentlemen of such probity that, a couple of years ago, I came within one vote of a Republican state senate seat in Wyoming, the most conservative part of the non-Islamic world. I'm a Freemason, a jack-Mormon, and a problem if I've been drinking. In short, just about everything these two are not.*

And yet…

When, by virtue of a couple of minor miracles, I was able to horse all three of us into my borrowed apartment on San Francisco's Potrero Hill, a curiously complete zone of shared understanding arose between us. It felt as if we'd been opining around the same cracker barrel for years. During the hour and a half this field remained intact, we covered a vast stretch of philosophical country which the hacked and decimated thing below can only hint at.

—John Barlow

HAVE YOU SEEN YOUR MOTHER BABY, STANDING IN THE SHADOW?

JOHN PERRY BARLOW: I want to talk with you guys about the Shadow. There is a way we have of concealing, projecting or wearing—in a peculiar fashion—that which we don't want to admit about ourselves. The thing that's interesting to me about you, Genesis, is that you look like an evil sonuvabitch from a distance. You look like a goddamn cannibal. And yet you are an extremely pleasant, polite, decent fellow.

If your intention is *not* to sell yourself and your imagination, then there's a real problem with people in authority

GENESIS P-ORRIDGE: I think I look really West Coast.

HAKIM BEY: I'm reading *Hermes* by Michel Sarres. And he brought up an interesting idea. He was talking precisely about this duality in Western culture... that there's always the on/off, dark/light, good/bad, up/down. He says that the third person is lost in Western discourse. Where any two are, there's the third who has to be overcome or ignored. Apparently, he's going to suggest ways in which the third person can be re-integrated. Perhaps that's what we need, instead of paradox. He even calls it "the parasite"—the guest who gives words for food instead of food for food. The interlocutor... the third interlocutor...

GEN: Have you read *The Third Mind* by Brion Gysin? When he and William Burroughs came together and applied the cut-up method to their text, they produced a third mind.

HAKIM: ...as a parasite on that interaction! That's what Sarres is talking about.

GEN: I always found *The Third Mind* one of the most interesting subversive manuals. I never recommend the novels and stories of Burroughs or Gysin, I just say read *The Third Mind* and try some of those exercises. A lot of implications concerning inherited perception are revealed.

Scotland Yard has now got lots of videotapes that I made of Brion in Paris talking about psychic hygiene, the alchemical variations in the temperatures of boiling water, through to the Master Musicians of Jajouka, all the events in Morocco that led him to many of his most intimate theories, even explaining how to make a good cup of tea by detailed observation of the bubbles, each of which he had named to denote each step. There's a lot of unique stuff there.

JOHN: I think they suppress that stuff mainly because they're afraid its reality could disturb what they wish to project *about* it. The *image* of Burroughs or you is so much easier to abuse. That's the scary thing about the information society—mythology completely detached from *any* reality but the one it's in the business of manufacturing. Pure simulation.

HAKIM: You know, the big difference between shamanic cultures and religious cultures is that dualistic shadow/anti-shadow thing is missing

from shamanic culture. It was pre-Manichean, and now we're looking for something which is post-Manichean. Urban shamanism.

JOHN: I saw a very old Tantric Buddhist shrine near Kyoto. And the central icon of this place was a large sculpture of two dragons—one on the bottom with his tail coming up, and the other on the top, with his tail going down, entwining with the first dragon's tail around the middle. It reminded me of the Caduceus and its snakes, except that it implied no value judgment between the upper and lower chakras. The point was the even interaction of the tails in the middle. So there was a duality, but it wasn't a weighted duality. It was more like a Yin/Yang.

HAKIM: No. The Yin/Yang theory is not Gnostic dualism. It's not the same thing. Eliade called it "dyadic." It's not the same as good and evil. It becomes so in later neo-Confucian thinking.

JOHN: Right. Taoism has no truck with good and evil at all.

HAKIM: Taoism seems to be the one religion that doesn't have the Gnostic trace.

JOHN: In our culture, the problem arose with the Romans.

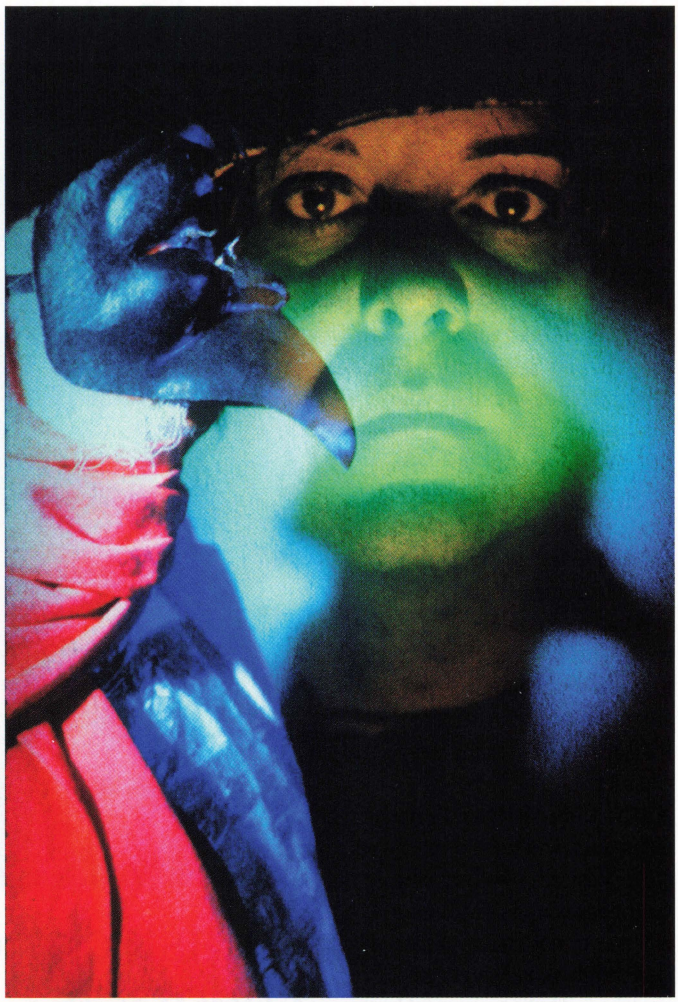
HAKIM: I think it goes further back. It's Babylon. It's just like the Rastas say, "It happened in Babylon." It's Marduk and Tiamat. It's Mr. Hard-on God up against Sloppy Mom. In China, chaos is a benevolent property. Huntun is the gourd or the egg out of which everything comes. He's a wonton. Huntun and wonton are the same words. He's like this little dumpling and everything good comes out of him. In Babylon, chaos is this disgusting monster vagina that has to be ripped up by Marduk into myriad blobs of shit and slime. And we are those globs of slime. That's how the human race came into being. What is the purpose of the human race? To serve Marduk, to serve the masculine principle, to store up grain in the granary for the priests, to pay for the priests for their sacrifice so they get the free hamburgers. That's the whole Western myth. It's St. George and the Dragon. St. George pins the dragon down.

In China, the dragon is the free expression of creativity. He's the mixture of Yin and Yang, the principle of power. But here it's *evil*, plain and simple. This is why chaos has kicked off, for me, for Ralph Abraham, and others, an interest in making a critique of this Western mythology, and saying, "Let's put Humpty Dumpty back together."

JOHN: There's been an interesting co-evolution lately of a lot of apparently disconnected things, like chaos mathematics and neo-tribalism, a sudden interest in Taoism and what I perceive to be a deep feminization of Western culture.

GEN: Some philosophers feel that there's a risk in absolute unconditional surrender of that male-God power, even though it's obviously failed miserably. Should we seek out every possible male trait and subordinate it to a female principle?

HAKIM: I didn't like the rule of Dad, but I don't think I'm going to like the rule of Mom either.



Burroughs
Paris
snips
scissors
money
money
money

THE LOST TRIBES OF P-ORRIDGE

GEN: I'm involved with raves and live events because they're celebrations of an autonomous tribal unit. I think that was one of the real reasons for the attack on Psychic TV. It was the fact that we were doing unannounced, unadvertised, private parties where three thousand young people would always turn up and

bring one more friend the next time. We were building this entire, separate, parallel vision—what Alaura calls "The Lost Tribe." We would discuss taboos, body modifications, self-empowerment, women's rights, animal rights, and all these different things as a spin-off. They weren't any of them essential in themselves. But what

one message: "Eat this, drink that, wear this, put this on your body; do *something* about the horrible loathsome disconnected thing that you are."

HAKIM: The trick is that none of it works. It's what Walter Benjamin calls the "Utopian trace," which is built into those commodities that make you dream of the perfection that's being sold to you. But it's only a trace, like a trace element. It's like homeopathic; it's hardly even there. So, of course, it doesn't work.

JOHN: Recently I was on an NBC talk show about LSD. One guest's son had supposedly been killed by LSD. And they also had a self-described "recovering LSD addict." It was a real set-up. But I noticed that almost every ad was either for a drug or for something that would make everything somehow different. So the LSD, which actually *can* make you different in a fundamental and satisfying way, represented the Demonic. LSD was the Shadow.

HAKIM: I read a quote from Malcolm McLaren, where he said, "Why are drugs popular? I'll tell you. Because only drugs can make you feel like people in TV ads look like they're feeling." Drugs are the only commodity that's actually more than just a trace. It is—in some ways—the thing.

JOHN: It's close. And that makes it an enormous threat to the culture, which is based on unfulfillable need.

The best anti-spasmodic is a joke

people always kept saying, over and over again, was that they felt they could relax and be themselves. The most obvious, ordinary condition that so very rarely happens.

JOHN: That's also why they go to Grateful Dead concerts. It's a sense of belonging which makes it possible for you to be yourself. When you're part of something on an organic level, then the self has some meaning. If you're only...

HAKIM: What about the problem of mediation? It sounds to me like you're less interested in media and more interested in the immediate, the un-mediated A street concert is participatory. It's got to be something you experience.

JOHN: Until McDonald's finds out about it and turns it into an ad.

GEN: Basically, the way you set your events up is the key to whether or not they're absorbed. And so far we haven't been absorbed. That's why we're being spat out. If your intention is not to sell yourself and your imagination, then there's a real problem with people in authority, because their normal debilitiser is the money carrot. They have a really patronizing view of the creative mind, that it really *wants* to whore itself to them.

JOHN: Most commerce in this country is based on unfulfilled psychic needs. The media have

Catastrophe Theory is really the science of the punch line

DON'T FORGET SHIVA

HAKIM: The best way to impose stability is through violence. Within every rational system is terror and death, unless you admit the third mind... the parasite. As long as linear reason calls the shots, it's always death and terror.

GEN: There's a great tape of Gyson, Gregory Corso, and Burroughs in Paris during the 50's. A letter arrives from some businessman in London, and you can actually hear Burroughs as he snips it with his

scissors saying, "Now let's see what it *really* says." And then he reads it aloud and it basically goes, "...money ... money... money." I took that very much to heart. When in doubt, be extreme and see what it *really* says. There's a need for people to smash the shop windows because that debris can be reassembled into amazing things.

JOHN: There's a particular need when you've got a culture which has placed such an inordinate value on stability. We'll have to go some distance to re-assert the dynamic.

HAKIM: That's what's so useful about chaos and complex dynamical system analysis, which is now cutting edge. It's going to take a while. The popular discourse is still Cartesian.

So what's the social anti-spasmodic for the spasms we've been talking about? Again, what about... tactics?

JOHN: The best anti-spasmodic is a joke. Take a leaf from Catastrophe Theory, which is really the science of the punch line. It's the thing that suddenly takes you out of the locked system and helps you go meta.

There's a great Neal Cassady story about this. The Pranksters all went into a bar in Oakland after a rally in Berkeley, and everybody was high on acid. It turned out to be the wrong kind of bar. Basically, there was a group of guys about to pretty much disembowel someone. But it was a perfectly symmetrical situation with nowhere for things to go but bad. Cassady strutted over to the assailant group, and said, "Hey, anybody want some gum?" And this was the catastrophe that caused the whole thing to dematerialize. For these locked symmetries, the most powerful cure is the prank.

HAKIM: That's an interesting way of looking at it. Poetic terrorism. Pirate humor.

GEN: That's why dada and surrealism and happenings and acid and cut-ups are actually tools of survival.

HAKIM: They're anti-spasmodics.

GEN: It's really empowering when you break up or collage stuff together, bring in the unexpected or the *inappropriate*. Those who are trying to impose the status quo and a linear view can't read that language.

JOHN: It's too ambiguous for neurotics.

GEN: They're unable to deal with the anarchic, confused, colliding, or absolutely illogical combinations. Tim Leary believes that's what is really behind the attacks on us. What Scotland Yard is actually attacking is my archive. For over 25 years I've collected things that don't fit together. I've got Dada stuff, Fluxus stuff, Brion Gysin's stuff, Burroughs' stuff, Leary's stuff... psychedelic, tragic, radical, trivial, random, and mathematical stuff. And we have no "agenda," as they like to say these days.

We've followed the illogical path. One day we just sold a spare Austin Osman painting to Chris Stein [of Blondie] and left. We spent time in Thailand, then we went to Nepal. Nepal was an amplifier and the confirmation of so many threads we had been unraveling and following for so much of our lives. The basic premise being AGORI... the path of no distinction. In this, everything is equal. There is no Shadow. All aspects of life and death, the minute to grandiose scales are fully integrated. Thus, no comment upon this amazing state of affairs is necessary. The most fabulous is commonplace. Devotion is as ordinary as taking a breath... and, of course, as extraordinary. We'd leave the hotel and cross the river, and there'd be dead dogs floating in sacks, or lodged in the mud banks with huge pigs eating their remains. There'd be children's corpses being cremated on the burning ghats, their ashes swept into the same river while, further downstream, women were washing their cooking pots. Next to the burning children, there'd be workers eating breakfast, lepers begging, tourists taking pictures, Hindus sacrificing goats to Kali, Tibetans prostrate... all in devotion, all simply living...

Nietzsche said that if we want to be a dancing star, we must have chaos within us

That's where we were just as we were being attacked in England. And thus we were better able to deal with the attack and its ramifications. We were able to say, "So what?" I mean, here were the Tibetans dealing with *genocide*. They've lost everything and yet they were embracing us without asking "Who are you, what do you believe, what do you do...?" There was a deeper sense of connection and recognition that instantly allowed us all to converse and be together. No justification was necessary. Ah, blessed relief! In the same way, the Shiva saddhus, the Nagas and the Agori Baba... all highly evolved, threshold pushing, ascetic strands of Hinduism that believe in the "Path of No Distinction"... they welcomed us too. We were on a bridge at Pashapati, near the main burning ghats, when suddenly the most revered holy man of the Agori was standing by us in his dreadlocks, and took us into his chamber where Europeans are not ordinarily allowed. There we sat around a fire which hasn't gone out once in over a thousand years. We exchanged spontaneous gifts, suspended Western categories of

thought, and absorbed the peace of primal vision. To be trusted is such a fabulous gift, even greater when one is given that trust under no obligation. The Agori Baba gave us white ash from the thousand-year-old fire, "to take with you to bless America" he said.

Strength. We've kept that strength through everything that's happened since then. It's very reassuring, an embrace in a realm beyond thought or sense. It is this momentary experience of "belonging" that is carrying us through; this basic task of navigating through the unexpected conjoining and juxtaposition, grappling with the grinding together of things is like learning a martial art. To bend, flow, parry, using the strengths and rushes as our own muscles.

That's the first step, getting these survival tools. Then the game is: *do* we finally evolve, or not? I talk about a human(e) race where the extra "e" is added to suggest ecstasy, eager, evolutionary, evil, experiential, egolessness, etc. In other words, whatever happens next. Above all else, a risk-taking explosion with the *eee*go tacked onto this story. We are each there within this mystery. We're at a point where there's going to be an evolution away from the previous static system into an embracing of chaos.

The basin of attraction is the infolding of desire

HAKIM: I don't think that we're *evolving* toward anything, in the Teilhard de Chardin sense of evolution being directed toward the collective organism of human mind. I have a lot of problems with that. But if you start to look at the way the world is going: political—you have a fragmentation of structure that is devolving down to smaller and smaller discrete communities at the same time that there's a globalization going on, then you can start to think of the paradoxical interaction of the global mind, the "all mind," becoming an increasingly coherent unit, even as individuation is becoming more profound. That seems hopeful, to me.

The problem is looking at it as an Omega Point. It's still teleological. And not only that, it's unjust. Because if Paleolithic human and medieval human and modern human are excluded from that Omega Point, then God is even a worse sonuvabitch than we suspected. That's what I've always objected to in Teilhard, and that's the problem I have with the idea of an evolution. I can't see it as an evolution. I see it as an infolding. Change. This is why I've tried to develop the idea of a Temporary Autonomous Zone. Because I'm sick and fucking tired of waiting for the revolution or the evolution. A certain degree of selfishness is required. And that selfishness also involves an altruism, because what I want for myself obviously must be available to the other.

I want to get away from Newtonian force and talk about the power in a fractal design. It's not teleological, nor vitalistic. It's not pointing to the future. It's not pointing to the past. Ilya Prigogine talks about "creative evolution," which to me is an infolding. It doesn't fold itself out towards the future, but it infolds itself towards desire.

JOHN: The basin of attraction.

HAKIM: The basin of attraction is the infolding of desire.

GEN: Basically, if what you're doing is dragging people across the line

of what they'll accept, then it's endorseable. It was actually Tim Poston, my catastrophe theory friend, who gave me direction in this area. We did a magazine together called *Delusions of Grandeur* in the 60's. The original slogan was "The Possibilities Alone are Endless." As he pointed out, the "The *Im*possibilities are Endless" too, as are all those phenomena which are neither possible nor impossible. The addenda are implied, not necessarily alluded to. There is a geological term I was made aware of later by a kinetic artist named Gerald Fitzgerald. (He was a prime mover in the *Exploding Galaxy* fluxus and happening group at that time, along with Derek Jarman and myself.) The term is *quaquaversal*, which means "pointing in every direction simultaneously."

JOHN: The challenge, at this point, is learning to read the tea leaves in such a fashion that your interpretive assumptions bear *some* relationship to the next person's. So your society doesn't just dissolve into babble; so you're not isolated by everybody's unique magical universe. One approach might be the ritualization and the re-tribalization of society. The point isn't that we agree. The point is that we all dance.

HAKIM: Nietzsche said that if we want to be a dancing star, we must have chaos within us. So, already in the 1880's, this concept was out there.

JOHN: Well, it was out there long before Nietzsche. Don't forget Shiva.

GEN: That's one of the most rejuvenating things about traveling in the Far East. There's a deep sense of continuity, a time-depth to the exploration.

HAKIM: It's only a very small time we've had history. It's useful to think of history as this thin layer of slime over a huge sea of the Paleolithic. It's not a question of a return *to* the Paleolithic but a return *of* the Paleolithic.

A HARD ENEMY IS GOOD TO FIND

GEN: Now we don't even belong to Her Majesty. We were subjects. Theoretically, we were actually *owned* by Her Majesty.

HAKIM: Along with the swans and Scottish Deerhounds.

GEN: I'm basically on the run and feeling good about it. The Global Village definitely seems to be forming. We're commuting to Japan. The Japanese are commuting here. Computer terminals and modems are linking people up. In all this action forms the wraith-like Global Village. There seem to be a lot more doors and windows left open than there were a few years ago.

On the good days—which are many—we think about sending postcards to D.C. Yeoull at Scotland Yard. Pictures of us on the beach in Thailand or giving rice and dal to lepers in Kathmandu, or onstage with Timothy Leary, or sitting by a fire here in California with our creek in the background. We think of saying, "D.C. Yeoull! Thank you very much for your interest in our work, and more importantly, for letting us go free so we can finally travel this world and do so much more of it!"

HAKIM: Jesse Helms deserves a few letters like that too.

GEN: Did I tell you what Yeoull said when some friends of mine went and tried to demand our archive back? He said, "My job, as I see it, is to rid the world once and for all of this art scum." [*laughter*] There's a lot to be said for the fanatic on your tail.

HAKIM: A good enemy is hard to find in this wishy-washy world of ours. M2

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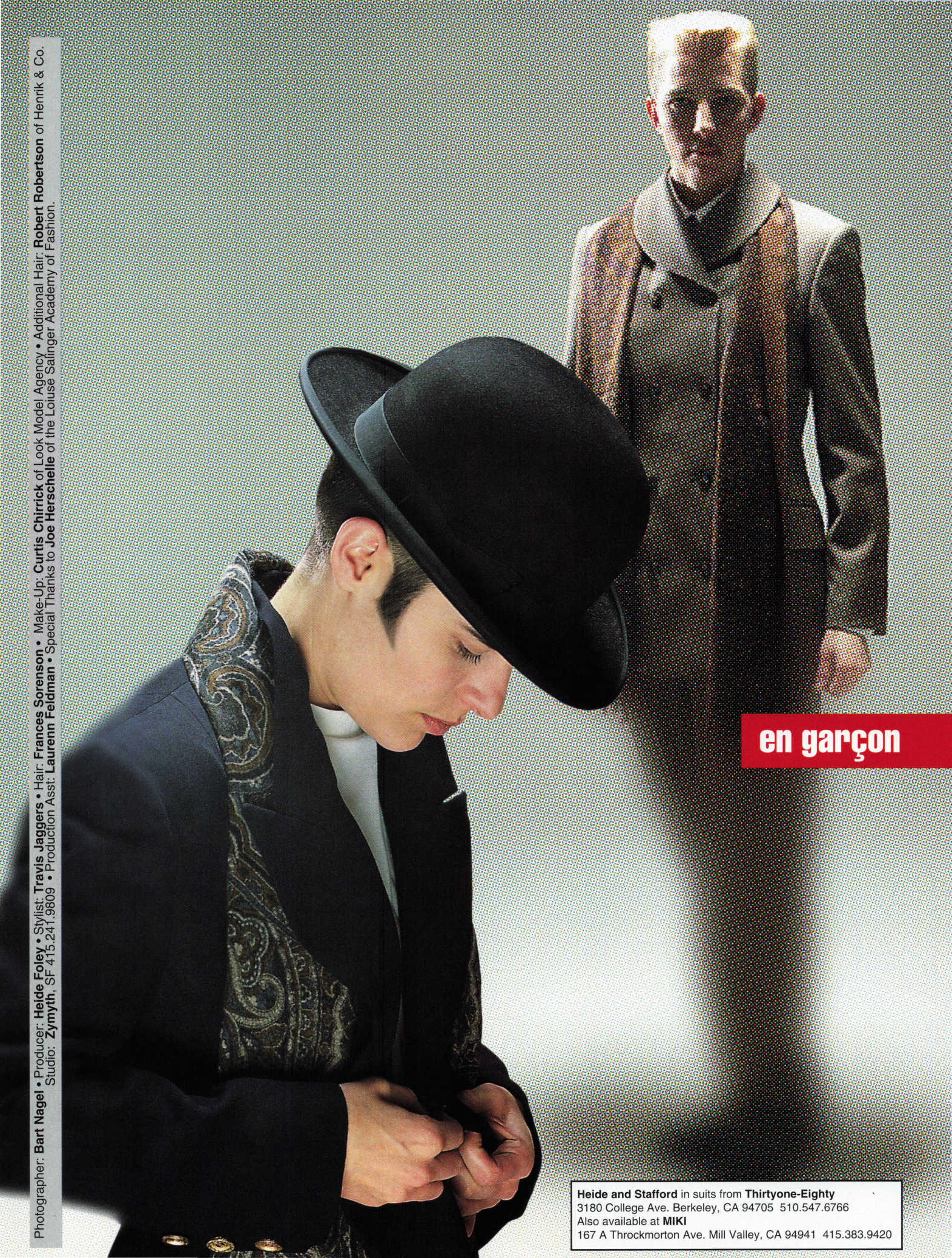

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Hell
The wet 'n' wild splattercore of GWAR

-Rama
Andrew Hultkrans
Photographs by Bart Nagel

GWAR have inflicted their Grunge Guignol on bloodthirsty irony addicts since their 1988 Shimmy-Disc debut Hell-O. *Their ribald stage show, in which the band members spew gallons of blood and semen onto a sea of willing moshers, strikes a new cultural low. Elaborate Conan-cum-Cronenberg get-ups cloak the former Richmond, Virginia art students. Rape, murder, sacrilege, bestiality... every known atrocity is committed in under two hours accompanied by faux speedmetal and, of course, plenty of vital fluids. Commenting on GWAR's latest live video* Tour de Scum, *head scumdog Oderus Urungus boasted "This video is so wet you're gonna have to wring out your VCR."*

I met the whole sick crew on the day of GWAR's San Francisco concert/death rally. The Scumdogs of the Universe were appropriately impounded in the Kennel Club. One of GWAR's befouled slave barges sat outside the club. Starving, penitent groupies pressed their faces against the glass in mute agony, silently mouthing vowels. Disregarding their pathetic pleas, I entered the club.

Inside, GWAR's stench preceded them. Kennel keepers were busy laying tarpaulins in preparation for the evening's excess effluvium. Many wore Desert Storm surplus gas masks. Wading through a sea of sticky phalluses, I made my way to a poorly lit back cavern to encounter noisome frontman Oderus Urungus, who sat quietly sucking on a human lard imprint cube. Without his gruesome exoskeleton, Oderus (a.k.a. David Brockie) resembles a Henry Rollins wax figurine whose head has been under the heat lamp a few times. His mouth spews vile vitriol as his eyes dart around the room, searching for PMRC-planted cameras.

I decided to conduct the interview in mock-Sumo stance, adopting confrontational chic. Oderus seemed to understand. We were periodically interrupted by loud "HUNNNH!" noises from an adjoining room, each followed by an equally loud "SPLASSSH!" People were moaning audibly. For a brief moment, I was worried for the safety of myself and the crew. Oderus was unruffled. "Seen this one?" he growled as he squirted gelatinous fat through his four front teeth. "Never" I lied, and wiped off the dictaphone.

—Andrew Hultkrans

Earth is considered the Cleveland of outer space

MONDO 2000: What does Gwar, the name, mean?

ODERUS URUNGUS: Nothing. Originally, it was just "GWAAAAAAAH!"

M2: Where did the Conan schtick come from?

OU: I was a huge Conan fan. I was weaned on Tolkien.

M2: And it was your idea to go further... with meat and dead animal skin?

OU: It was a logical step. We figured, "What would a band of blood-thirsty chaos warriors from outer space do on earth?" Well, probably kill everything in their path and have utter contempt for the human race and any other form of life.

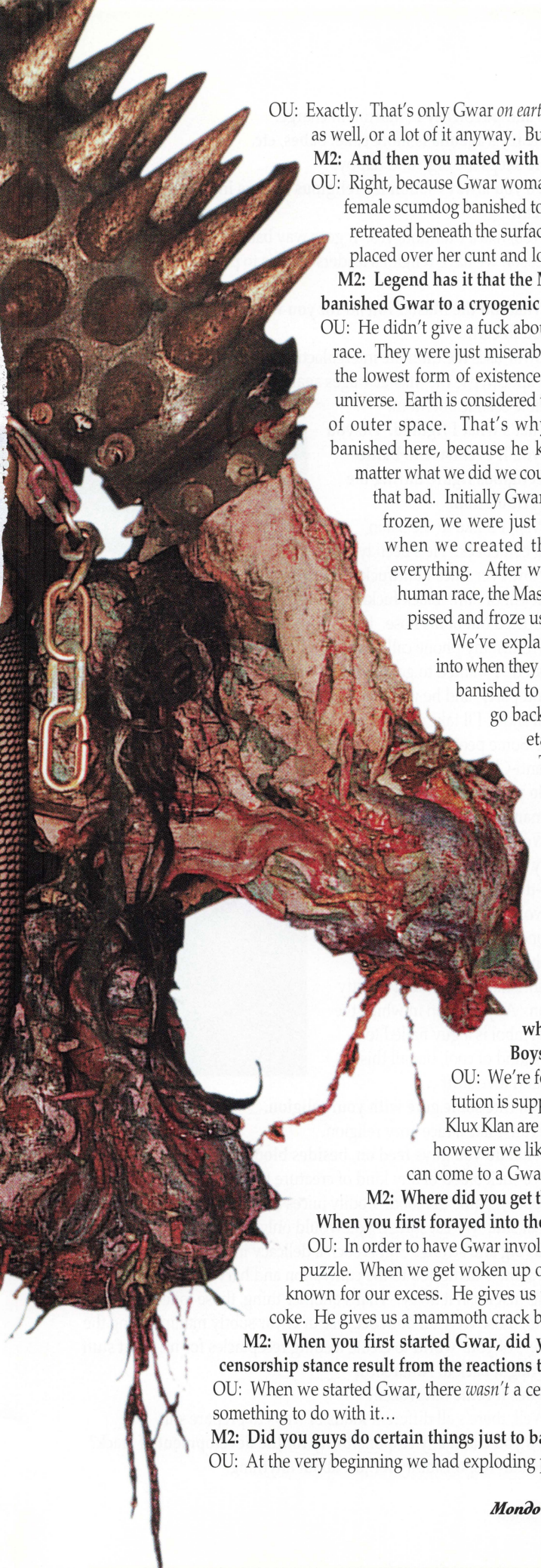
M2: Are you familiar with *Tribulation 99*? It reminds me of Gwar. A local filmmaker (Craig Baldwin) combined 1950's sci-fi film clips with other found footage to tell a convoluted story of a band of aliens called the Quetzalcoatls. The "Q's" come from another galaxy in their spaceship and fly through a hole in the South Pole to the center of the earth where they then go on to influence all the CIA-engineered events throughout Latin America. It's very complicated and very funny.

OU: It can't be as complicated as our history.

M2: It's close. It's a different theory but there are some resonances.

OU: It's like any mythos. Like Tolkien created the language, alphabet, and history for this imaginary race of beings. Gwar's the same thing, but we don't have any restrictions. We can make up anything. Gwar killed the dinosaurs because they were a rival race. When we came to earth the dinosaurs had this cool culture. They used to drive cars and wear shoes. Gwar hated them immediately and they had these big wars. That's how the Grand Canyon was created. Then we strung their entrails across the canyon and plucked them and started writing music.

M2: The earliest guitar strings were dinosaur gut?



OU: Exactly. That's only Gwar *on earth*. They were responsible for everything in outer space as well, or a lot of it anyway. But here they get to be a big fish in a small pond.

M2: And then you mated with apes...

OU: Right, because Gwar woman wouldn't let us have sex with her. She was the only female scumdog banished to earth with Gwar. She had her pussy all locked up. She retreated beneath the surface of the earth for many years and had this huge iron box placed over her cunt and lost the key.

M2: Legend has it that the Master was very disappointed in the human race, and banished Gwar to a cryogenic freeze.

OU: He didn't give a fuck about the human race. They were just miserable maggots—the lowest form of existence in the entire universe. Earth is considered the Cleveland of outer space. That's why Gwar was banished here, because he knew that no matter what we did we couldn't fuck up that bad. Initially Gwar wasn't even frozen, we were just here. That's when we created the apes and everything. After we created the human race, the Master said, "Oh no, they created more humans!" So he got pissed and froze us.

There are five levels past orgasm. Most of us aren't going to experience that

We've explained Gwar's mythos on earth, but we haven't gotten into when they were in outer space and fucking up so bad that they were banished to earth. That's where we want to send the next album—go back in time when Gwar was still running huge interplanetary slave barges and ravaging entire worlds at will. Those were the good old days.

M2: Now the idea of defending the Cuttlefish of Cthulu [*Oderus' original penis, confiscated by local authorities in Charlotte, N.C. during GWAR's 1990 tour*] as a fish—did that come off-the-cuff at the time when you were being accused of obscenity?

OU: Well, it was always a fish. We saw it as a way that we could get attention. The penis is its own character, but it's not even really a penis. It looks like a refugee from *H. R. Puff 'n' Stuff*. It's cute.

M2: Do you feel any solidarity with other artists who are pushing the buttons of the PMRC, like the Geto Boys or N.W.A.?

OU: We're for total freedom of expression. That's what the Constitution is supposedly about. If militant right wing groups like the Ku Klux Klan are allowed to exist, why can't we express ourselves as artists however we like? Anybody who doesn't have a huge log up their ass can come to a Gwar show and see that it's a good vibe.

M2: Where did you get the idea for Sleazy P. Martini [*Gwar's human manager*]? When you first forayed into the music industry, did you encounter people like him?

OU: In order to have Gwar involved in the record business, he's a necessary piece of the puzzle. When we get woken up out of our freeze, we're still babes in the woods. We're known for our excess. He gives us the link to the rock 'n' roll culture—the chicks and the coke. He gives us a mammoth crack boulder right off the bat, and we're hooked.

M2: When you first started Gwar, did you have a political agenda in mind, or did the anti-censorship stance result from the reactions to your initial shows?

OU: When we started Gwar, there *wasn't* a censorship movement in this country. Maybe Gwar had something to do with it...

M2: Did you guys do certain things just to bait people?

OU: At the very beginning we had exploding penises, anal violations, sex with dead animals... all

the things society considers taboo. We did it and the rest of the world finally caught up.

M2: What's Gwar's relationship to nuclear energy?

OU: It tastes good.

M2: Does the Gwar vs. Technology concept pit Gwar against the advancement of convenience technology, or against more insidious government-run surveillance technology?

OU: The big theme for this show is barbarism. I'm personally willing to go back in time about 1,000 years. What I like about Gwar is that it's like going back in time. It's a return to the primeval, barbaric, ritualistic, shamanistic, crazed, fuck-in-the-mud-and-eat-mushrooms kind of lifestyle.

M2: We have a frequent correspondent who writes alien conspiracy theory letters who maintains that Ross Perot is the leader of a gray alien conspiracy to conquer humanity through mind control. Do you have any opinions on the secret government?

OU: Well, I don't know much about this Perot guy, but I do know that the U.S. government is controlled by aliens that live underneath the Pentagon. They were summoned by the Masons about 200 years ago. It's a beast called Woygoy. They couldn't control it—it took over their minds. But it's imprisoned under there. The whole Pentagon is a gigantic cap on this well of interstellar foulness that's gonna fuck up the whole world. We sing about Woygoy. We knew him before we were banished. He was a real fucker. He's at war with us right now. That's why America must be destroyed this year. That's why one of the last shows is in Washington D.C., where we'll fight Woygoy. We'll go into the bowels beneath the Pentagon and put an end to its miserable existence once and for all. Of course, the entire country will sink after that.

M2: Are you going to be suspended as America sinks?

OU: Well, we can defy gravity at will. There's no problem. Besides we'll be riding on the tippy-top tail of the world maggot at that point. There are these world maggots that live in centers of worlds all curled up. When a world is smashed apart like a giant husk, the world maggot springs forth. And we ride on them through space, commuting maggot cells. This is one of the reasons why we destroy planets—actually crack them in half—to release these beings. Like most other planets, earth has a world maggot, and once we've destroyed the whole planet, we'll ride to the stars on its back.

M2: Where are you going next?

OU: We're going back to find the Master, who looks like the goddamn Planter's Peanut Man, kick his ass and put Sleazy P. Martini in charge.

M2: Sleazy's agenda is more coke, babes, etc.

OU: He keeps me high and happy.

M2: Do you always sodomize religious leaders in public before you kill them?

OU: Well, it is a tradition, yes. It goes way back to our planet. The only reason we have religious leaders at all is to publicly sodomize them.

M2: What did the Master intend for you when he created you and sent you to earth?

OU: Gwar uses the ultimate intergalactic trump card in the continuing war of apocalypse the Master wages against himself to eliminate his incredible cosmic boredom.

M2: That's what I figured. Do you think you'll ever have to battle some religious figure during the Great Tribulation?

OU: Well, I'd like to see Satan make a comeback. He's been lying pretty low ever since I buttfucked the shit out of him. Black fucking cum spurted out of his nose. He didn't return my phone calls and I got pissed. I wanted to go down to Hell and party, and he was just being a snob. I'll take on the anti-Christ. Some people say that Gwar *is* the anti-Christ, but that's not true.

M2: So you're not part of any kind of human Christian...

OU: Well, we aspire. All the fertility cult shit, goat worship and stuff—that's all Gwar right there. Werewolves, vampires, all that shit. Take one look at Balsac and you'll see. The hooves are right there. This Christianity is kind of a shitty religion. Any religion in which the main symbol is a guy nailed to a cross is kind of cool, but all this peace and love stuff...

Any religion in which the main symbol is a guy nailed to a cross is kind of cool

M2: You like some gore with your religion.

OU: Yeah, I like a nice gory religion.

M2: What do you guys feed on, besides blood?

OU: We suck blood of any kind of creature that bleeds around us. I like blood. I bathe in blood. Bodily juices are just great. A lot of people don't eat shit. We eat shit. If you would only eat shit you would be twice as big and strong. Shit is such a delicacy in outer space. There's whole planets dedicated to the cultivation and harvest of shit. And humans just flush it away. That's another thing, those toilets you guys shit into, those were all built because of Gwar subtly manipulating the plumbers of your world to create feeding receptacles for us. That stuff goes straight back to Antarctica.

M2: Does it come out frozen?

OU: Well, there's all different kinds of ways to prepare shit.

M2: Do you claim any responsibility for the development of crack?

OU: I claim responsibility for just about anything.

M2: But your cosmology maintains that Sleazy, a human being, introduced you to crack.
OU: Human inspiration is birthed from the dreams of Gwar. So Gwar is dreaming about the drugs they want to do in Antarctica, and it inspires humans to create the stuff. That's how the Holocaust and the Black Death and the Crusades all happened while Gwar wasn't around. The Spanish Inquisition, the Mongol wars...
M2: You share anything with lizards?
OU: I love lizards. I see them as little sperm cells that escape from me. I grew back a new cock this year. I checked myself into the Betty Ford clinic after that.
M2: What does the new cock look like? Is it impressive?

OU: It's big and filthy. It's got fins. It's more fish-like than ever. I think I was foreseeing a future of legal battles.
M2: So you kept it fishy...
OU: Yeah, in fact people were throwing things at it. Fish were leaping out of the crowd last night, like salmon. More fish than ever are actually coming to the shows. *Big* fish.
M2: What does Oderus see for the future of this country?
OU: I'm not going to make any idle promises I can't keep, but I see hatred, death, war in the streets, murder, riot, famine, disease... and that's whether Gwar's around or not. So the future looks good.
M2: Don't you guys ever get bored with all this pestilence and disease?
OU: We just go back to Antarctica and chill out for a while—do some penguin-booting. But this whole planet is pissing me off. It's like being trapped in a bus station forever. If the fucking world doesn't go down I'm going to hook up with the rotting carcass of Burl Ives and start doing honky tonk cafés.
M2: Is people's persistence in the use of oil an addiction?
OU: Well, the human race has got a lot of personal initiative. They're ready to destroy themselves at the drop of a hat. They probably don't really need much help from Gwar, but hey, we're amusing ourselves. When they start playing around with nuclear energy, it's like extra credit.
M2: What do you think about trying to escape from the realities of the world through virtual reality—by wearing goggles or helmets.
OU: It's great. It makes them all the more blind.
M2: It's a natural extension of people's willingness to...
OU: ...put boxes on their heads.
M2: What can we look forward to tonight on stage?
OU: It's going to be a writhing mass of wretched pathetic citizenry. It's going to be a madhouse. I look for acts of extreme cruelty. Humans will be hurling themselves en masse on stage. It will be nothing less than a continual brawl the entire night.
M2: Do you have any sympathy for or control over serial killers?
OU: Well, everyone knows that Jeffrey Dahmer was the head of the local Milwaukee Gwar fan club. We put up his bail immediately—he's in Antarctica right now taking care of the place while we're gone.
M2: What about all the missing kids? Do you claim responsibility?
OU: Yes, they're back in Antarctica. What we like to do when we're not on tour is take out the Gwar helicopters and go flying around disguised as art students and harvest slaves. My cravings must be satisfied, so we try to steal as many 4 to 8 year old boys as possible
M2: Your old penis was able to talk. Is your new penis still...?
OU: Oh sure. We're talking to each other the entire set. I let him sing a coupla songs sometimes.
M2: What does he sing, "You keep me hanging on"?

Shit is such a delicacy in outer space. And humans just flush it away

OU: "Please release me, let me go."
M2: Whatever became of the skatepunk kid who was in the beginning of *Phallus in Wonderland*?
OU: I believe he's on the scab machine back in Antarctica having his nipples flayed for eternity.
M2: People that are dedicated to you...
OU: ...are treated with revile and disgust.

SLYMENSTRA HYMEN

MONDO 2000: Gwar is a very male trip, yet you incorporate Slymenstra in such a way as to make her dominant. You're a very powerful character who saves them when they get their asses kicked. How did you manage that integration?
SLYMENSTRA HYMEN: I have no idea. I'd push for it, and they'd say they wanted me to be more slutty. They'd tease me about reading mother goddess stuff and tell me that people had

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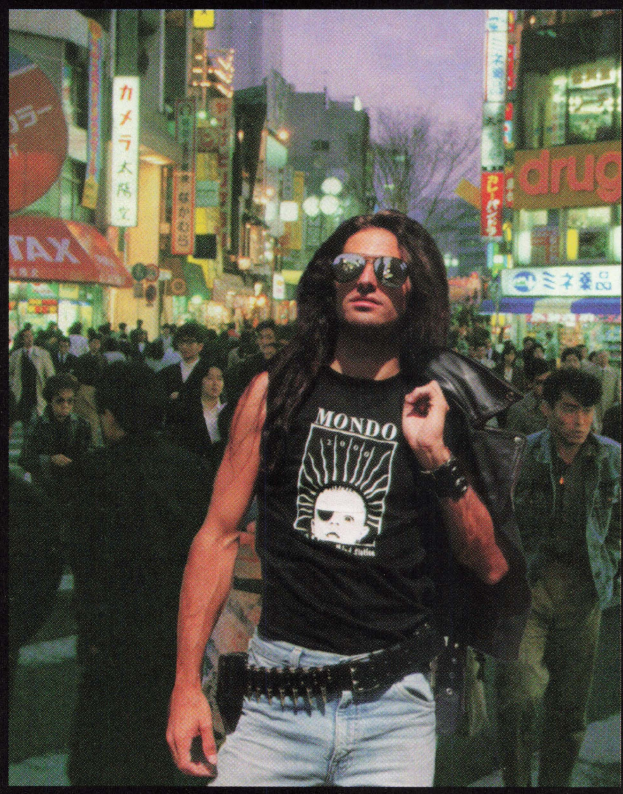

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always been at war. They'd say agrarian systems were a myth. I slip a lot of it in without them noticing.

M2: You're obviously a feminist. How do you feel about the penises and sex crimes, etc.?

SH: Well, it exists, so let's talk about it. To me it's like they're showing their own stupidity.

M2: Gwar pushes all of America's favorite censorship buttons at once: violence, sex, rape, crack, heavy metal, and takes it all to eleven—making a serious comment and a parody simultaneously.

SH: Exactly. Like the song "Have You Seen Me" about missing children. We're not advocating raping children, we're talking about how many children are out there getting raped. And how people are turned on by it...

M2: ...and how a repressive society actually leads to more psychotic deviants doing more disgusting things.

What I like about Gwar is that it's a return to the primeval, barbaric, fuck-in-the-mud-and-eat-mushrooms kind of lifestyle

SH: The *sickest* thing about this is that we can make money doing it.

M2: I think about a quarter of your audience completely buys it. They're the people who thought Spinal Tap was serious. But the others see the different levels.

SH: The first time I saw Gwar I was taking a mythology class, and I thought they'd read Joseph Campbell and picked out archetypes. When I asked them about it, they said "Why are you trying to intellectualize this?" It's an accident from the collective unconscious.

M2: Obviously you *do* get people who think you're the best thing since Dio. They take you at face value because you're what they've always wanted—hardcore heavy metal with Conan costumes.

SH: Some people will always see me as a frivolous sex object because that's where their head is at, and others will see all the other imagery.

M2: I see you as an example of the new sex-positive feminist school. The Grace Jones School for Girls. The strong, potentially destructive woman who's in touch with some ancient energy. Our senior editor, St. Jude, a woman, is championing the need for female porn created by and for women. She thinks this is necessary to usher the next generation of adolescent girls into a true feminist outlook—being sex-positive and positive about their gender and their power. But a lot of traditional feminists balk at the idea of pornography. They think it necessarily exploits women.

SH: I find running around half-naked really liberating. My mom doesn't understand that.

M2: What do you think of the idea of women writing porn for women? As St. Jude points out, young men as adolescents have pornography to bond together and say "Hmmm. This is arousing. Why?" She thinks that since women don't have that as they grow up,

they get neurotic about sex early on. So the next level is for women to start writing porn for women so there is an initiation into sexuality that prevents girls from being ashamed of it as teenagers.

SH: ...and not thinking it's gross. Reading sexual material sometimes makes a woman feel good. I think maybe that should be explored.

M2: Do you have any advice for future women?

SH: Women who aspire to be more like men lack ambition. Don't let men tell you that you can't do what you can do. I've built a car. I can build a house. Build your upper body strength in elementary school. It's a shame the kind of physical education this country has. It doesn't develop upper body or abdominal strength. Your abdomen is the most important for keeping your back strong. If women had better upper body strength they'd have more freedom. They wouldn't have to ask men to carry stuff for them and all the little manipulations that go along with that—asking men for favors, etc.

M2: No more "girl push-ups." Women can do regular push-ups.

SH: Work out and make yourself stronger. *Do* a lot more.

M2: What do you think about Madonna?

SH: I love her. She's amazing.

M2: I see Slymenstra as a radical extension of Madonna.

SH: She does a lot of digging into history and playing it out again—pulling a lot of female imagery into her stuff. Like stigmata...

M2: Is Slymenstra supposed to be satisfying people's expectations for the old idea of female sexuality gone awry—the "madwoman in the attic" concept—where a woman sexually aroused becomes a psychotic beast? Traditionally, men have been scared of female sexuality.

SH: What I portray is what men have turned women into—an unhappy creature, a sex nympho gone crazy. She never gets any because she's not allowed to.

M2: So she becomes a Bertha Mason figure.

SH: She has a certain sadness because of the separation of men and women. That's why she's totally celibate. Also, that's why the traditional female icons have been either virgins or whores. I try to be sexy with my dancing, to show how sexy women are. That's how powerful they can be.

M2: Is the torch dance from any specific ritual?

SH: Women were the first ones to tend fires and work with fire and metal. I knew how to fire blow, but I thought the torch dance would be interesting. Also, the Persephone myth. She took fire down to Hades with her to tend the souls and then the seasons began. In my comic, when I first landed on the planet I wandered around naked for years and created human culture. Gwar meets me in my cave at Lascaux. I'm naked and Oderus tries to rape me. So I flee to the underworld and come back as this horrible bitch with spike armor.

M2: So he doesn't rape you?

SH: He does rape me. She takes the fire down to the underworld with her and that's when all the seasons start. I show that in my comic. Gwar is out in the snow saying, "Oderus, you really fucked up. Man, it's all her fault." And his little dick is talking, "Man, my balls are blue."

M2: Oderus told me that Slymenstra won't have sex with any of the other scumdogs. Why is that?

SH: I wanted to make her that untouchable figure that men have created. Women are supposed to hold out and not like sex... that whole pedestal trip.

M2: You've become completely celibate to spite men.

SH: A lot of the goddesses are supposed to be lesbian or wouldn't have men.

M2: So what are Slymenstra's sexual preferences?

SH: Snakes and goats and fish.

M2: If Slymenstra did a song, what would it be about?

SH: I did a song called "Pussy Planet" about how men watch so much porn that when they're with a real woman it doesn't mean anything. Too many people are spending their life energy beating off every morning into a toilet. It's wasting energy. You're stealing from your organs, making life shorter, making your old age much more painful, because that's a lot of chi.

M2: What should they be doing?

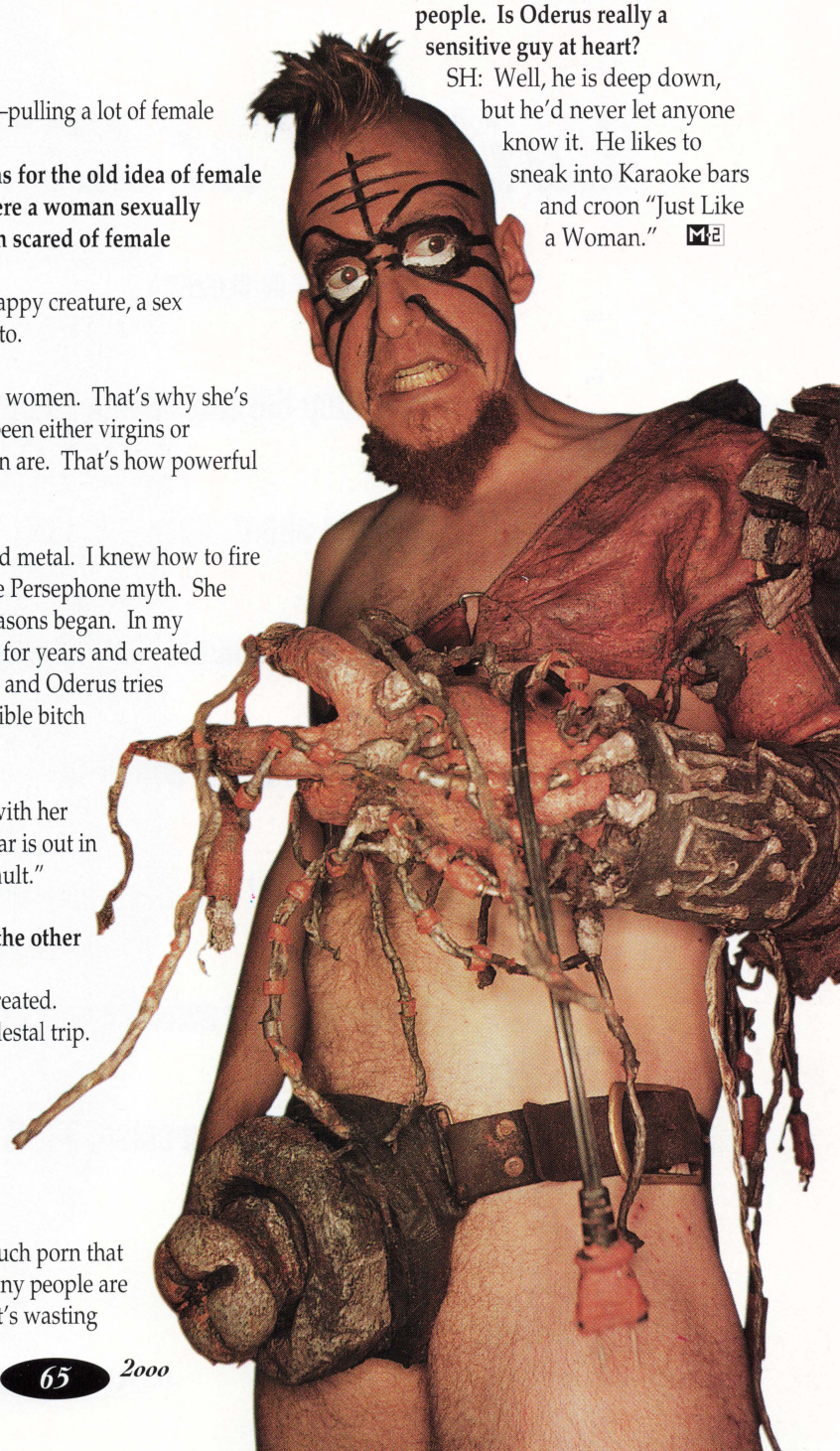
SH: Making love to women much longer.

M2: Saving up the jam for actual encounters with women.

SH: Yes, and concentrating on it. I wish men in this country would read about the Chinese philosophy of sex—about building chi and getting past orgasm. There are five levels past orgasm. Most of us aren't going to experience that because we're always beating off and getting that instant sensation.

M2: It's true. Americans are instant grat people. Is Oderus really a sensitive guy at heart?

SH: Well, he is deep down, but he'd never let anyone know it. He likes to sneak into Karaoke bars and croon "Just Like a Woman." M2



The Fab VIER

Laibach at Home and Abroad

BY KENNETH LADDISH

FAST TIMES IN SLOVENIA

High atop the sacred Kum, their personal Obersalzburg, Laibach is conducting a photo shoot, posing between the twin spires of an ancient chapel and a military communication facility. Four stubbled heads gaze impassively into the camera. Dressed in their trademark "fascist chic," they are the antithesis of the decadent western rock band—a sinister Anti-Beatles. I am granted an audience with the Fab Vier on the terrace of their Alpine retreat. Their English is precise, but flavored with an almost Transylvanian accent.

DISSECTING THE BODY POLITIC

Album cover, Let it Be: Struum 58/FIAT

MONDO 2000: For the record, what are your names?
LAIBACH: Not the individual but the organization speaks, our individual names are of no importance.
M2: How did the group get started?
L: Must we go through all this again? You will find the answers to all mundane questions in our new book, published by your Amok press.

GROSSE KUNSTZERSTÖRUNG

Laibach was the name given to the city of Ljubljana during periods of German occupation. While Ljubljana today is the capital of the new independent Republic of Slovenia, it remains occupied. Since 1980 it has billeted the controversial music group which has preempted the name.

In 1984 Laibach co-founded the neo-national art collective Neue Slowenische Kunst (New Slovene Art) along with the IRWIN group of painters and the Scipion Nasice Sisters Theater. Inspired by the model of Totalitarian industrial production, NSK members voluntarily renounce their individual tastes, convictions and names in joyful subordination to the collective identity and centralized aesthetic program of the institution.

The group's provocative music, graphics and drama thoroughly scandalized their provincial Communist backwater. Hoping for equal acclaim abroad, the artists launched an all-out assault on western civilization, quickly becoming Slovenia's best known export. International success and the collapse of Communism has allowed NSK to expand its scope—it now claims more than 60 members working in departments devoted to film, architecture, design and pure philosophy. Amok Press has recently published *Neue Slowenische Kunst*, a retro-retrospective documenting the art, manifestos and theories of NSK.

LATTER DAY MODERNISTS IN FORMER YUGOSLAVIA

NSK applies one philosophy across many disciplines. This doctrine is called, in official NSK nomenclature, the Retrogarde Principle: going "back to the future" in search of Slovene identity. Eschewing originality as "an illusion of quasi-revolutionaries"—a very original idea—they resurrect the dead languages of the historical avant garde: Futurism, Constructivism, Socialist Realism, postmodernism and rock 'n' roll.

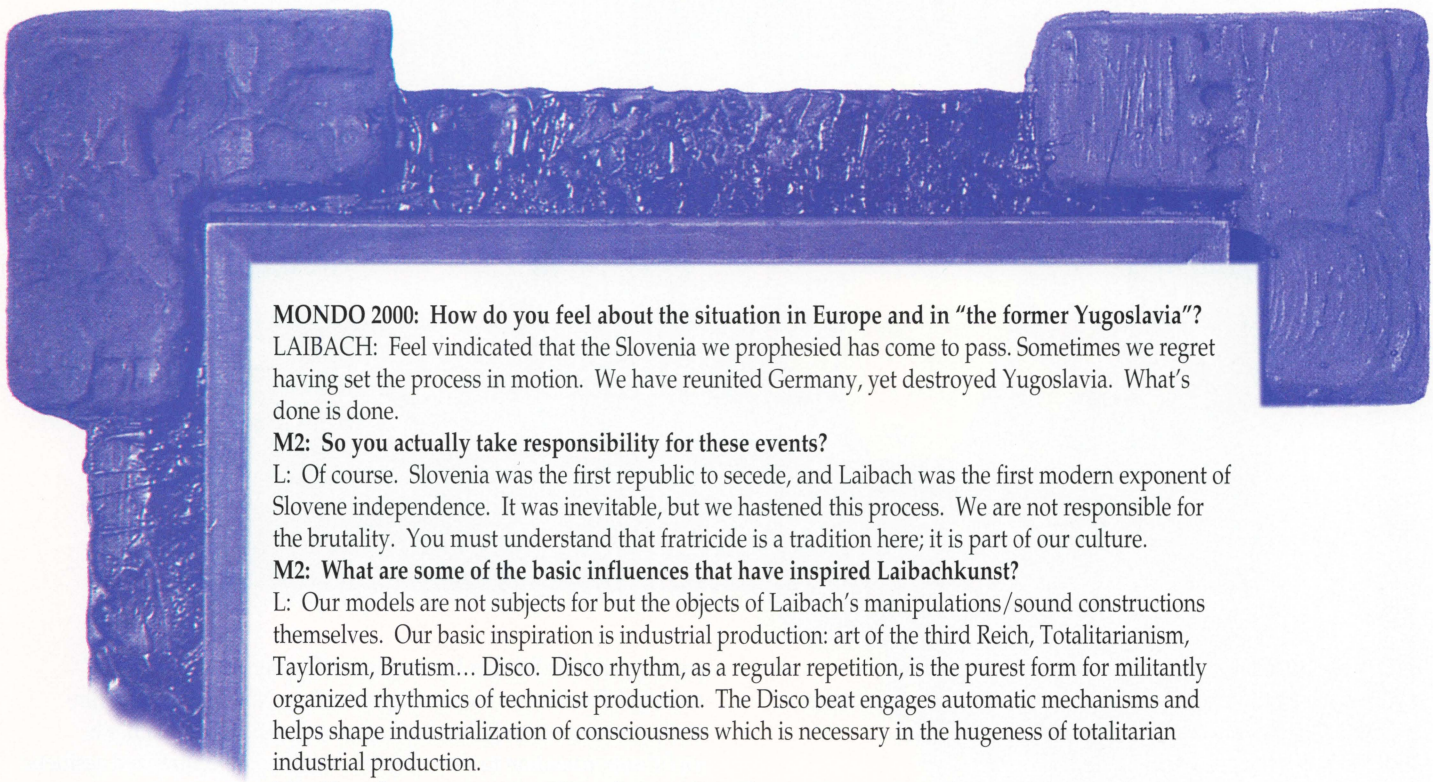
The Retro principle is a constant shifting of language and perspective for comparative cultural analysis. Unlike postmodernism, which decontextualizes found elements to produce faux novelty, NSK *recontextualizes* identifiable motifs "sampled" from art and music history, creating faux canons. "Politics," they declare, "is the highest and all-embracing art." They reduce art, politics, religion and economics to an iconic common denominator: political symbols, corporate logos, religious iconography and artistic and musical references commingle promiscuously as playing pieces in a perverse Balkan Glass Bead Game.

But there is a madness to their method: an infusion of proprietary semiotics which refers to themselves and the Slovene experience. This cryptic homegrown iconography is never precisely defined; its meanings and intentions remain vague—and vaguely threatening.

LICENSE TO ILLUMINATE

Laibach's discography is an encyclopedia of rock 'n' roll revisionism. *Opus Dei* (1987) explores the relationship between disco and dictatorship, and reconciles the 1940's with the 1980's. Its Riefenstahlian atmosphere and draconian arrangements soar toward Teutonic rapture. In 1988 they shook the foundations of pop culture with the twin releases of *Let It Be* and *Sympathy for the Devil*. Laibach digests the Apple corpse with the powerful acids of Balkan history and New Slovene Aesthetics. *Sympathy* is a dance-oriented deconstruction which draws lots of blood from the Stones. Laibach considers the darker side of the 60's—sex, drugs, violence and metaphysics. *Macbeth* (1990) is the neoclassical soundtrack to their Hamburg stage production—*Macbeth* as an allegory for the life of Rudolf Hess.

—Kenneth Laddish



MONDO 2000: How do you feel about the situation in Europe and in "the former Yugoslavia"?
LAIBACH: Feel vindicated that the Slovenia we prophesied has come to pass. Sometimes we regret having set the process in motion. We have reunited Germany, yet destroyed Yugoslavia. What's done is done.

M2: So you actually take responsibility for these events?
L: Of course. Slovenia was the first republic to secede, and Laibach was the first modern exponent of Slovene independence. It was inevitable, but we hastened this process. We are not responsible for the brutality. You must understand that fratricide is a tradition here; it is part of our culture.

M2: What are some of the basic influences that have inspired Laibachkunst?
L: Our models are not subjects for but the objects of Laibach's manipulations/sound constructions themselves. Our basic inspiration is industrial production: art of the third Reich, Totalitarianism, Taylorism, Brutism... Disco. Disco rhythm, as a regular repetition, is the purest form for militantly organized rhythmics of technicist production. The Disco beat engages automatic mechanisms and helps shape industrialization of consciousness which is necessary in the hugeness of totalitarian industrial production.

M2: How do you see yourself in relationship to the contemporary and historical avant garde?
L: If you are speaking of the *Avanguardists*, the national youth organization of pre-war Italy, we acknowledge a deep admiration for their rhythmic and graceful performances of mass choreography. In the middle ages, the term *avant garde* referred to the pack of dogs in a hunt. In modern times, these dogs have turned on their keepers. Man has become the prize and he is being gradually torn apart by the "avant garde." This is not our way, ours is the method of *Retrogarde*. We take two steps forward and one step back.

M2: So, the eternal question, are you guys fascists or what?
L: We are fascists as much as Hitler was a painter.

M2: How do you feel about your popularity among skinheads and other neo-fascists?
L: We are happy to sell albums and concert tickets to whoever wants to buy them. It was amusing

for us to see Skinheads and Blacks crowding the stage together, on our American tour, united by our music. We point out that this popularity among Skins is an American phenomenon, probably attributable to the widespread ignorance of foreign language and art history in your country. In Europe, particularly in Germany we are constantly *harassed* by neo-Nazis. Once they started a fire under our tour bus causing many thousand dollars worth of damage.

M2: Why do you speak German instead of Slovenian, especially in context of the implied nationalism of the name Neue Slowenische Kunst?

L: German is such a poetic language! The history and future of Slovenia is inseparable from the German culture. In the past, we have often been under Germanic rule, most recently in the 1940's. German nations are our natural trading partners. The Austrian border is less than an hour from here.

M2: People talk about the occult power of your music, your concerts have been described as almost initiatory experiences...

L: When we perform, we are in a state of consciousness analogous to that of the shaman. There is evidence that the power we generate is channeled into the audience and elsewhere.

M2: What kind of evidence?

L: It is vulgar to speak of such things. Wherever we go we seem to provoke seemingly "occult" phenomena, often with quite tragic results. We don't want to say too much on this, but the day we arrived in London to record our new album, Freddy Mercury died and the film *Freddy is Dead* was released.

M2: Would you class with this phenomenon the ritual suicide of your original lead singer Thomas Hostnik in 1981? What about the reports that you had planned collaborations with Andy Warhol and Joseph Beuys which were both canceled due to their untimely deaths?

L: We have said too much about this already. Perhaps it was—how do you say—coincidence... [*Note: When I was transcribing this paragraph into my Mac, my system suddenly crashed for no apparent reason.*]

M2: How do you characterize your relationship with controversial Austrian performance artist Herman Nitsch?

L: We are friends. We get together and laugh at each others art.

M2: What was the basis of the rumors about a possible collaboration between you and Devo several years ago? What is the relationship between the two bands—are Devo and Laibach analogous in any way?

L: There is indeed contact between Devo and Laibach, but for various reasons, not the least of which was geography, no collaboration has materialized. The relation between the two groups is like Batman and the Joker. You can decide which is which.

M2: How do you feel about the term "industrial" applied to your music? Do you consider yourself part of the "industrial" genre?

L: We have long been inspired by the model of industrial production. Our music is put together in the industrial environment of a modern recording studio for the purpose of large scale production and international dissemination. In this sense we are certainly part of the industrial genre. Einsturzende Neubauten, Madonna, Michael Jackson, Laibach—we are all totally industrial.

M2: Your treatment of the Stones seemed somewhat more "sympathetic" than that of the Beatles. What is your relationship with the Beatles?

L: We think of the Beatles exactly the same as we think of our Volkswagen beetle.

M2: What have other bands said about your covers?

L: Mick Jagger and Freddy Mercury liked what we did with their material. Opus was outraged by our reworking and publicly disavowed us. George Harrison admitted that some of our tracks from *Let It Be* were improvements on the Beatles' "originals."

M2: What about McCartney?

L: I don't know if he's heard any of it. What does he care? Michael Jackson owns it all anyway.

HOW THE WEST WAS WON

Two years in preparation, Laibach has released *Kapital* and the single "Wirtschaft ist Tot" (Capitalism is dead). The theme of economic collapse is propagated in many languages, often with a poignant lyricism. This release presents a new sound and new style. If Laibach holds true to form, *Kapital* is not a description of the monetary trials we have seen, but is a harbinger of economic tribulations yet to come.

I caught up with them in San Francisco, at the end of their *Kapital* Tour. In their homeland the boys drive a VW; here they travel by limousine and wear sunglasses at night. As I climb into their long white vehicle, their spokesman reminds me, "Those who associate with us often meet with premature deaths."

M2: Do you have a message for America?

L: Yes, *Wirtschaft ist tot*—the economy is dead. Capitalism is dead.

M2: Is your new album *Kapital* meant as a critique of capitalism, like *Das Kapital*?

L: Kapital has been the most important topic of the last several centuries. In recent years, the main contention was between the capitalist and communist systems. Each had its own definition of capital and economics.

Marxism/Leninism defined it in idealistic utopian terms, and hence it could not produce a realistic economy. The so-called capitalist system defined capital in the most vulgar terms. Based on the premise that greed is a virtue, the "free" market economy is devoid of idealism, yet it promulgates utopian values. Through Hollywood, advertising and popular culture, the West sold the world on its idyllic vision of material bliss. Communism failed because it bought the western mythology. Capitalism succeeded because it incorporated communistic/totalitarian production methods: collectivization of farmlands by corporations, union breaking and so on. You can see that totalitarianism is alive in the west while it is almost dead in the east. Thus Nazi fascism is the rule of financial capital itself.

M2: Laibach/NSK presents itself as a utopian society. Do you have or offer an answer to the world's problems?

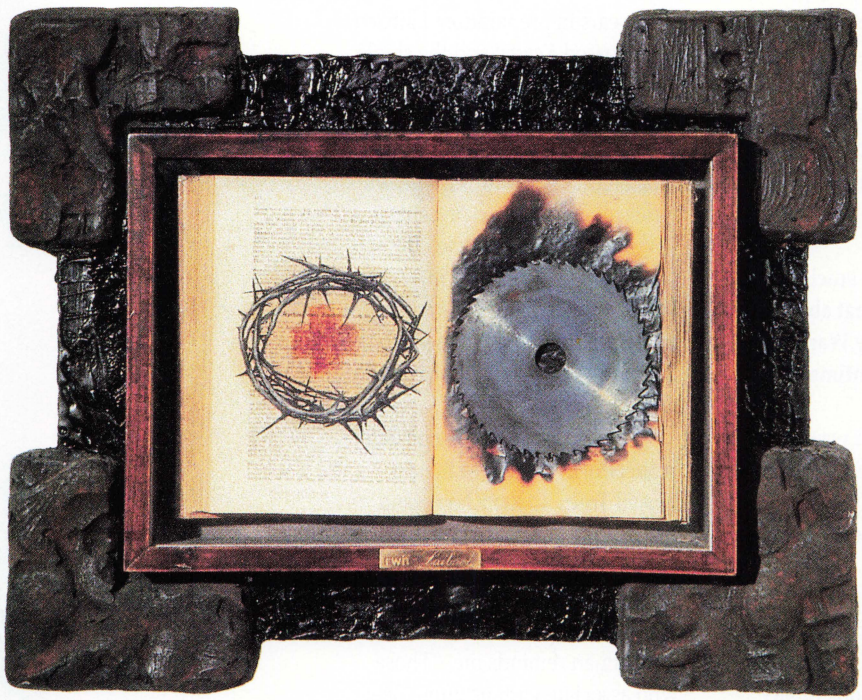
L: [*Laughs sardonically*] If we had such a solution, do you think we would tell it to you? Laibach is part of NSK—a utopian project which exists as a state without physical borders or territory but which realizes the utopian ideal manifested in the everyday.

M2: The headgear and silver face paint of your new uniforms definitely evoke the mercurial but they seem to be a great departure from your trademark "fascist chic." Your new stage show is less physical and more technological.

L: We have never had uniforms. We are interested in contemporary mythology. The cosmonaut occupies the symbolic space once occupied by gods. We are fascinated by the concept of the Man-machine. Such ideas are partially incorporated into our current performance.

M2: You are now with Warner Brothers, a cultural superpower. Does this conflict with your stated ideals? Are you not integrated into the Western military industrial complex?

L: We have never considered ourselves to be saints. We are standing inside the pop industry using the very same mechanisms as everybody else does, and we have no illusions about this. But our geography, history and temperament give us a certain distance which allows us to also stand outside it. Our relationship with the label does not demand any compromise from us. A better question is to what extent Warner has been compromised by Laibach.



M2: Yes, that is a good question. You are still up to your old tricks. *Kapital* contains its share of cryptic references that some might read as more evidence of your fascism. For instance, the chorus of "White Law" seems to be a Eurocentric racist anthem. In your live performance, you projected the image of a meat grinder behind you during this number. You have begged the question, and I await your improbable but unimpeachable defense for this.

L: We do not "defend" our work. But you are not incorrect to infer that "White Law" deals with the subject of white supremacy. "White Law" *is* white power. We say this absolutely, concretely, directly. All of so-called modern civilization is based on White Law. This is what the song is describing. *It is the law which turns meat into shit through the process of unification.*

M2: So it's "objective" like Ice-T's "Cop Killer"?

L: If you like... I will tell you the label really didn't want us to include this, but we prevailed. Actually, we haven't really gotten that many complaints about it.

M2: Are you aware some of your songs have become minor anthems in the gay community? "Get Back," for example, imbued with homoerotic connotations... how do you feel about this?

L: If Laibach can sample Queen, I suppose queens can sample Laibach.

M2: What about when your music is sampled and remixed by house DJs and techno groups

L: We do not condone this, but it can only improve the final product.

My story had grown tiresome, and I understood that they longed to get back to their Homeland. I forced on them my copy of Illuminatus *as they boarded their tour bus, and then fired a final question at a red-eyed band member:*

M2: Wie issn das Gras aus Kalifornien?

L: Nicht schlecht: besser als ein sein ruf... M2

Death for Death, 1987 from Neue Slowenissche Kunst, *AMOK Books, Los Angeles*

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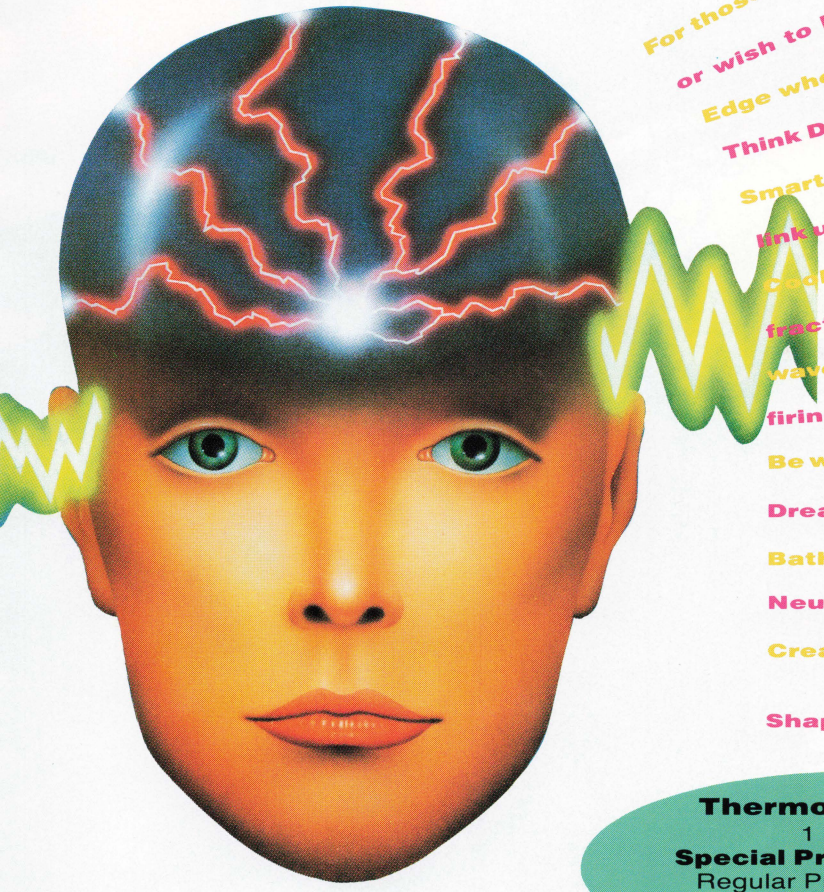

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Prophets of Rage
the Disposable Heroes of Hiphoprisy

Michael Franti interviewed by David Kushner Photography by Jill Greenberg

These heroes are "disposable" in name only. We need more music heroes like these.

—William S. Burroughs

A new prophet of conscience is stomping towards the millennium. With a mouthful of rage and trunkload of funk, the Disposable Heroes of Hiphoprisy have arrived—literate and beastly—redefining rap and revitalizing the technorevolution.

"If you're a young black person, your role models are athletes and entertainers," says vocalist Michael Franti. "You see these people used by the corporate system to make money, after which they're thrown on the scrap heap. They're disposable heroes."

Franti and percussionist Rono Tse created a new dialect of industrial/jazz/hiphop on their debut release Hypocrisy is the Greatest Luxury. *Their first single, "Television, The Drug of the Nation," drew MTV's blood with a razor-sharp critique. "The Language of Violence" took a refreshing stand as rap's first anti-gay bashing song. Billy Bragg picked Hiphoprisy as openers. So did U2. Burroughs came next, promising one of the more intriguing collaborations in hip-hop history.*

Five years ago, Michael Franti was on a basketball scholarship at the University of San Francisco. Rono Tse was a wide receiver at the College of Marin. It wasn't long before these childhood friends dropped their respective balls to form the Beatnigs, a truly "industrial" band on Jello Biafra's Alternative Tentacles label. When the Beatnigs split, Franti and Tse traded junk for funk. Hiphoprisy was born.

Supplemented by jazz guitarist Charlie Hunter and drummer Simone W., Hiphoprisy's live show garnered a "don't miss" reputation across the country. Franti drops science in a booming baritone, pogoing across the stage. Rono leaps in hyperkinetic twists, wielding steel chains and a metal grinder, squeezing showers of sparks out of sheet metal.

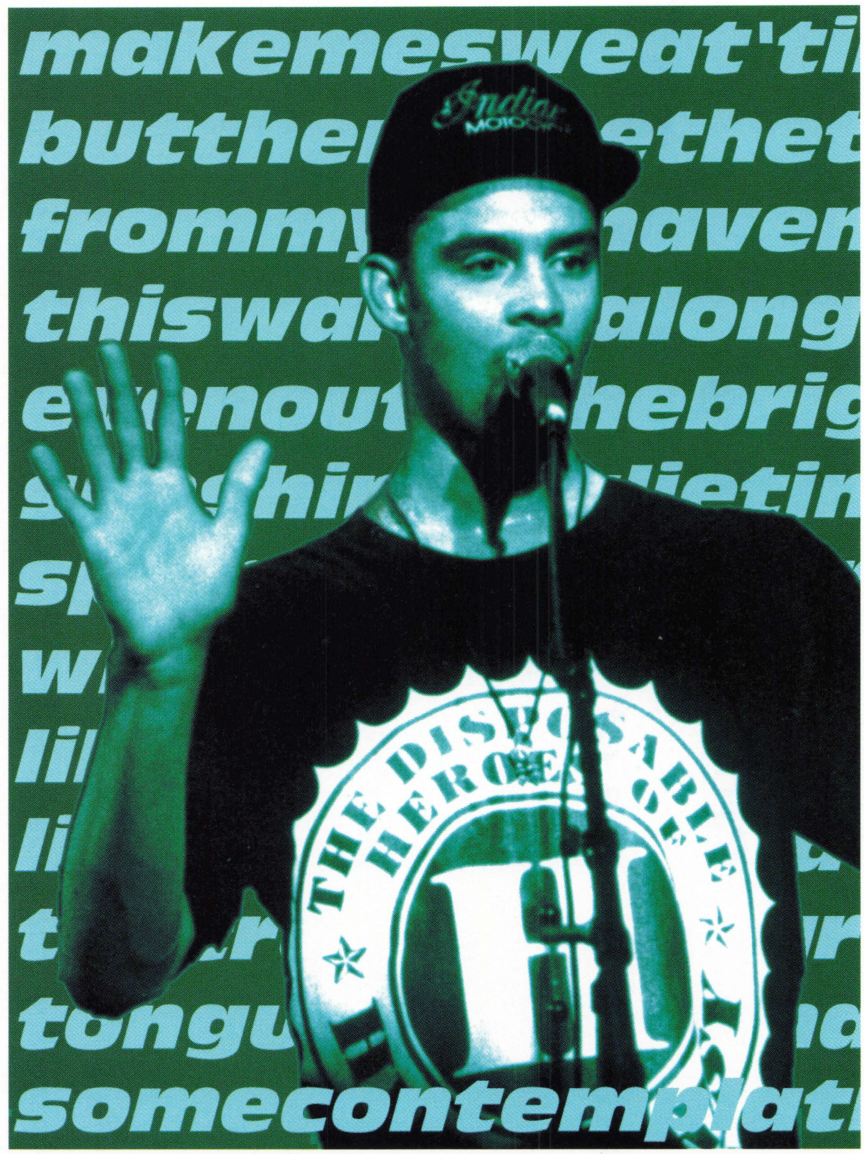
—David Kushner

MONDO 2000: How did you come to be such a political artist?

MICHAEL FRANTI: When I was fourteen or so, I heard Mutabaruka, Bob Marley, and Gil-Scott Heron—social consciousness in lyrics. That finally got me into writing, because issues of race and identity were always on my mind as I grew up. I was adopted into a family of white parents. They adopted other black children, but my family situation was confrontational. Anytime we went to a restaurant... anytime we went *anywhere*, there was a confrontation.

When I had a kid of my own at 21, I searched for my birth parents and found them. It took two years of going through public records. When I met my mother, I asked her, "Why'd you put me up for adoption?" My mother is Irish and German and my father is African and Seminole Indian. She told me that she was going to have to move back in with her family in order to raise me and that her father—my grandfather—was a straight-up racist. He never would've given me a chance out of the box. Then I met my father's side of the family and my grandmother. She was raised by her grandparents and her grandmother was a slave until she was twelve. Her grandfather was a Seminole Indian with a traditional lifestyle.

So these issues of race and social consciousness were always a part of me. To find my birth parents and see that the two sides of my family were diametrically opposed... it's an awakening. In my artwork, I'm always trying to explore where I come from and who I am.



IT DON'T MEAN A THANG IF IT AIN'T GOT THAT KKLAANG

M2: What about moving from industrial to hip-hop? Those are two dramatically different cultures. How did that evolve?

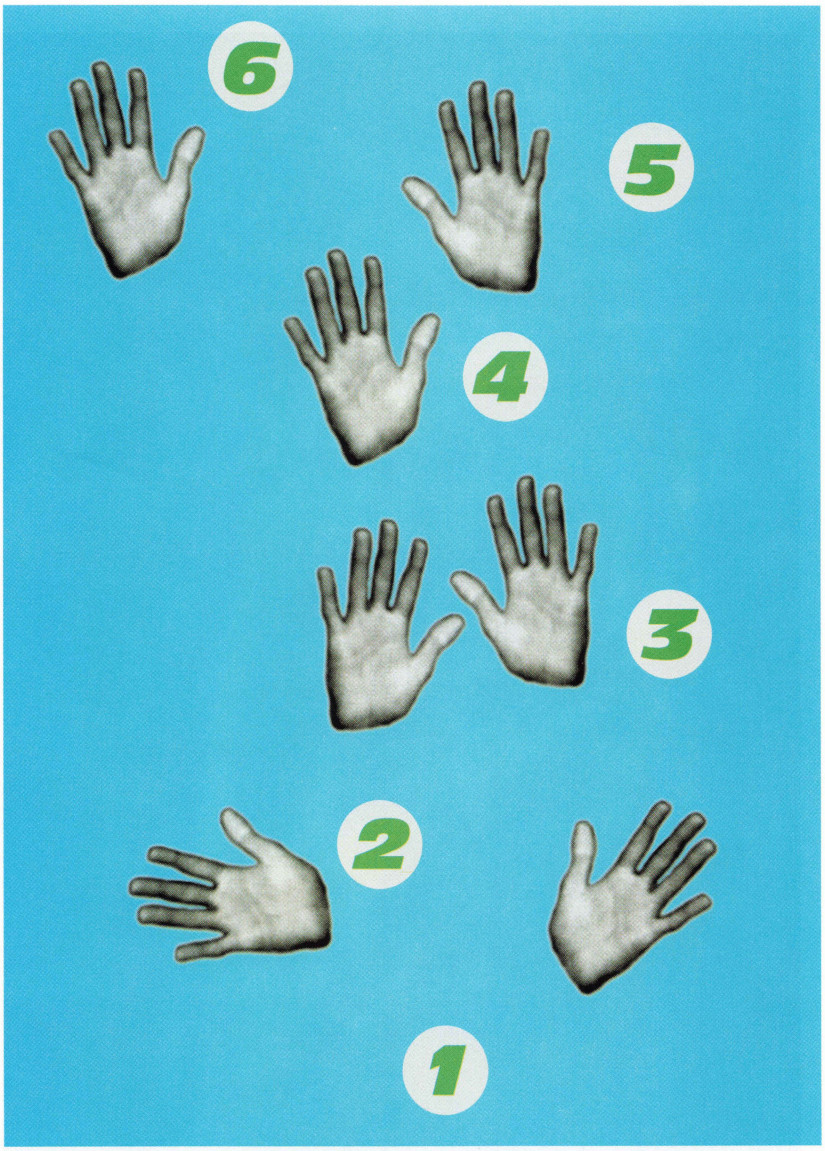
MF: When we started the Beatnigs, we weren't trying to be an industrial band. We never listened to "industrial" music. Initially, I was writing poetry and working with our drummer Kevin at a cake factory. We used to work with these machines that would glue the cake boxes shut before they were frozen. We had this machine that made a sound like "PPPSHHHHKK PPPSHHHHKK." So we started doing rhythms with it while we were working. Then I started doing poetry on top of it. Kevin was drumming.

So we decided to do some jamming with just drums and poetry, later adding dance. Meanwhile we still worked these machine jobs. We didn't have any place to rehearse so we'd go out to the shipyard. First we started bringing drums out there and rehearsing. Then we'd climb on top of these big, rusty metal rollers that were for flattening sheet metal. We'd practice up there because these old machines had all these different sounds. Then we started writing more mellow stuff and bringing it in to perform at parties at school. I started playing bass. Rono joined the group. Someone was playing African percussion. That's how it developed.

Then we started to hear about other groups doing things with metal, which is what *I* consider to be industrial music. I never considered it to be a bunch of guys screaming unintelligible lyrics,

playing everything on sequencers and DAT, and just making a lot of noise. I thought there had to be an industrial element to making the music.

We put out an album on Alternative Tentacles, so everybody thought it was punk. The only reason we did that was because we had run out of money and Biafra had seen us play at a show with Millions of Dead Cops. But that was the first punk show any of us had ever attended. It wasn't like we were coming from a punk scene or an industrial scene. We just found that we could do shows in those kinds of settings.



M2: How did that evolve into Disposable Heroes?

MF: Rono and I had been listening to hip-hop ever since we were kids. We were both in high school when everyone was rapping all the time. Garage parties had hip-hop. That's what we were listening to while touring with the Beatnigs. We'd been trying to get the Beatnigs to do it. The other two guys really wanted to do avant garde, free-form music. They quit to do that. For us, it was a logical extension of the Beatnigs. Some of the last songs we did together were kind of hip-hop.

THE STREET WILL FIND ITS OWN USE FOR THINGS, EXAMPLE #102

M2: Do you see hip-hop as a crucial link between technology and culture?

MF: One thing that's interesting about hip-hop is that the music being done on samplers is a different cultural aesthetic applied to an already existing technology. When samplers first were being used, it was to enhance a vocal track or to mask something that was screwed up. When DJs were going back and forth between break beats on records, pretty soon they decided, "Hey, let's take this cultural mix and apply it to this new technology." They started using samplers to sample beats and loops of other songs and mixing it all together. That's one example of how different cultural applications of the same technology can come up with totally different art forms.

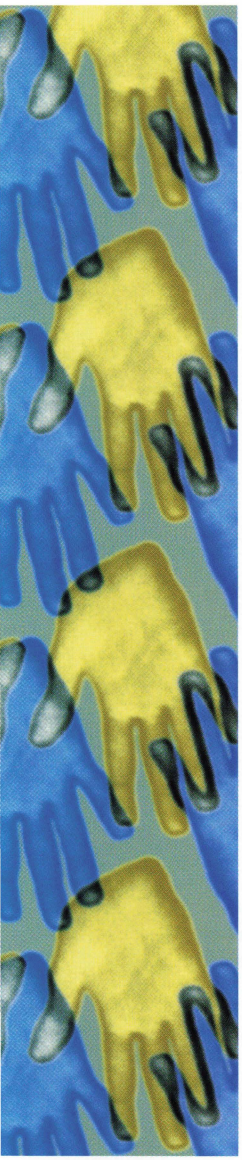
M2: Do you think there's a symbiotic relationship between technology and art?

MF: I think that technology only goes in one direction. While we are

People have compassion fatigue. It's like we need ad executives to design the images

often quick to critique technology and examine how morality has never been able to keep up with it, it *is* the reason we have so much destruction. If we don't seize the power of technology, the right wing and the multinationals are going to continue to run rampant with it. But, at the same time, one of the most powerful weapons for change is having access to these different forms of technology—computers, video, music... It's just like any other medium—like painting or writing. When the first printing press came out, suddenly there had to be copyright laws, because the masses were learning to read. Before it was just the Catholic church writing everything in Latin, and only a few people could read or write Latin. Suddenly everybody had access to this press and could say whatever they wanted.

That's what is happening today—with Ice-T, Jello Biafra, and a lot of photographers and videographers. People have access to media they never had before. People are hearing and seeing things that were never heard or seen before, and there's a huge effort to crack down on it.



RETRO GHETTO

M2: Would you agree that underground movements are going to have to embrace technology to counter the status quo?

MF: I definitely think so. It's already happening. A lot of people are trying to seize the power of technology. We have to be thoughtful of the future.

Sometimes it disturbs me to see retro trends. Nostalgia numbs people—trapping them in some bygone era they glorify. I like to see people who are working towards the future.

PAY PER VIEWS

M2: What about television? I can write whatever I want and nobody can say anything about it. But television has maximum corporate control. How then can television be used as a means for revolution?

MF: Freedom of speech and freedom of the press are great ideas in theory, but too bad everyone doesn't have a printing press. That's how it is with TV. Should the First Amendment laws really come under TV? Because not everyone can say what they want on TV. What does that mean? A few people can say whatever they want on TV because they have enough money to run it?

M2: What about public access?

MF: Public access is definitely an opportunity. But even with public access, there are still parameters. Back in the mid-80's there was a big uproar because this public access station was allowing the White Aryan Resistance to have a program, but wasn't allowing other groups to do counterpoints because they didn't have the money. We held a protest to prevent the White Aryan Resistance from having this show. Now I realize that we shouldn't have been protesting against the group, we should have been fighting to get *our own* program on there. 'Cause I think that anybody—the White Aryan Resistance, the fucking Nazis, *whoever*—should be able to have a show and express their opinions. At the end of the day, I feel that the truth—given the opportunity to present itself—will ring the loudest.

M2: Do you think corporations and radical right groups are using television as a weapon?

MF: I don't think it's necessarily a weapon. In western culture, everything is based on this theory of debt and repayment—a violent theory of warfare—where you need to have weapons to fight this or that. But in eastern culture everything is based on enlightenment.

So I try to look at TV not so much as a weapon, but as a tool of enlightenment.

The problem is that so few people have access to it. But in the meantime, the tape of Rodney King enlightened the whole world overnight to the facts of police brutality against the black community.

INFORMATION ICONOMY

M2: So you think the tapes of the King beating and the truck driver beating can help *improve* race relations?

MF: I don't know if they can *improve* race relations, but they can get people to talk about the issues. That's how things change in people's minds and hearts—through discussion. But you do run the risk of something like China. In Tiananmen Square you have the great picture of the guy standing in front of the tank, which becomes a symbol. It's like a picture of Marilyn Monroe or Elvis or a picture of Rodney King. Meanwhile, in South Africa, we've had shit going on forever, but there's not one image that symbolizes it to the world.

M2: So we need those images.

MF: In some ways we do, but... I read an article about the photographer who took that picture. He really didn't think it was his strongest picture. He says he has other pictures of people getting brutalized by cops that were so incredible. But they weren't allowed to be printed, because they were just too graphic.

There are incidents like that occurring all over the world—situations just as turbulent as Tiananmen Square or the uprising in L.A.—but they don't have an image to present to the world. People have compassion fatigue. They're so used to seeing starving babies that it takes someone standing in front of a tank or burning down a building. It's like we need ad executives to design the images. Otherwise, people have no compassion.

M2: Are you aware of *I Witness Video*? Basically people send in videos of their own Rodney King beating.

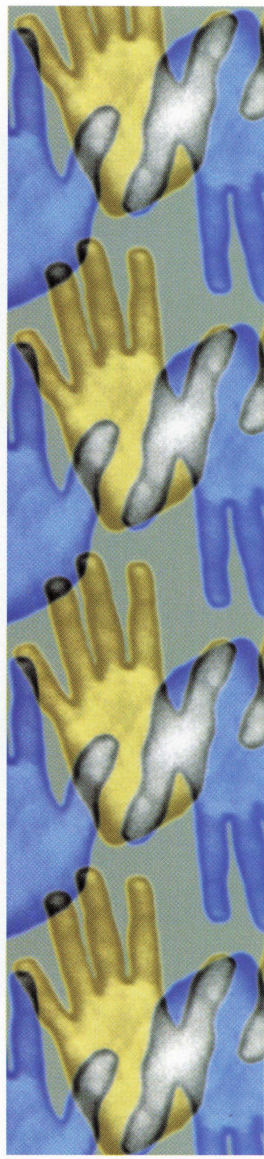
MF: Like *Network*.

M2: They show tapes of people being smashed by tidal waves, car accidents, things like that.

MF: Like that film *Network*, where they pay to have liberation armies rob banks and get it on film.

M2: So how is anybody going to give a shit if they're constantly desensitized?

MF: I don't think anybody *is* gonna give a shit. That's one of the dangers of television. It *does* anaesthetize people to things that are really happening in the world. It makes people wanna cluster themselves indoors and say, "Hey man, it's fucked up out there. Let's build some more freeways and more cars so we don't have to talk to nobody."

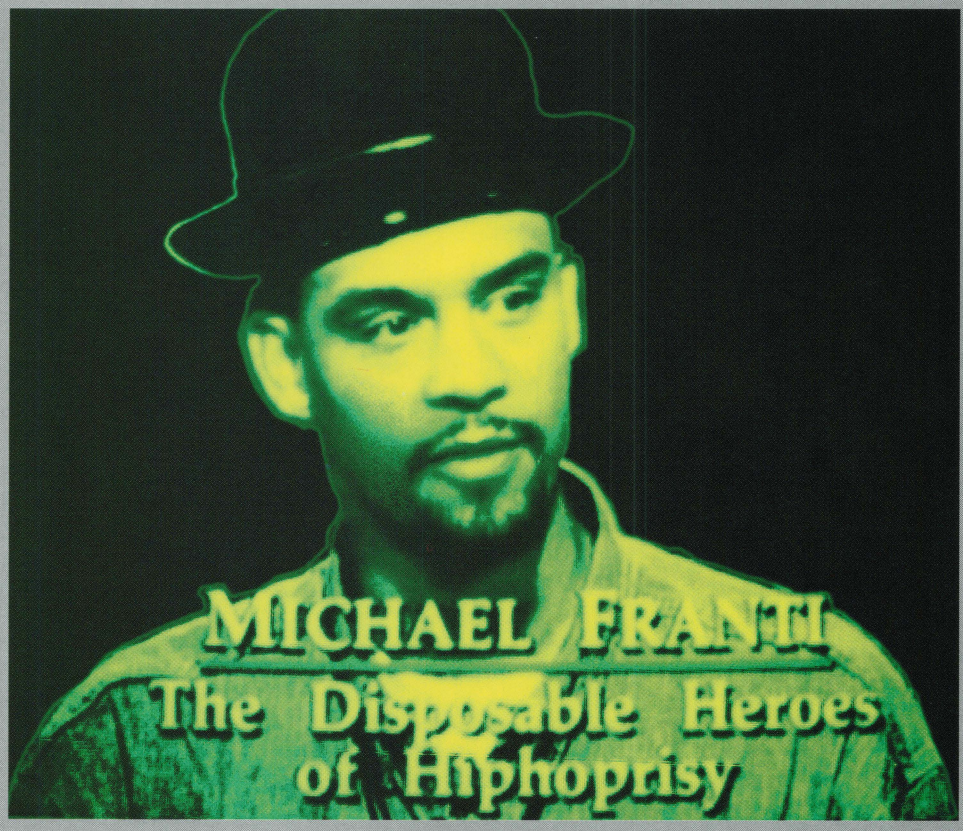


VR THE WORLD, VR THE CHILDREN

M2: That's one angle on interactive television and virtual reality. It seems like we're systematically eliminating every reason to leave our homes. Do you think that's where we're headed?

MF: Some people are, but the majority of the world still lives without television. Television is getting into every corner of the world, but most people are just dealing with daily existence. The human struggle is still the ultimate reality. It's like the 60's. People were exploring LSD and everybody was worried that the whole country was going to be on LSD, because they wanted to

tune out. I don't think it's going to happen. There will be some people who will jump into a virtual world and never come back. There will be some people who will jump into that world and try to seek some enlightenment. They may find it, they may not. Then they'll go back to what they normally do. I don't really think anyone's going to be trapped in a virtual world anymore than they are now. Like I said, technology only goes in one direction. Every time some new technology comes out, people get fatalistic. They think it's going to be the end of the world. The fact is, most people are never exposed to this technology and are still dealing with "How are we going to get food? How are we going to raise the children?"



RAISE THE DOUBLE STANDARD

M2: What do you think is the source of hypocrisy in America?

MF: I think that most people are just trying to deal with the six inches in front of their face. I know *I* am, as a parent and as somebody who works in an industry that has no conscience. I'm trying to *be* an artist of conscience, but the bottom line in the record industry is selling records. That's how you make your keep. So there's constant conflicting pressures.

M2: Is it *possible* for an individual to exist without engaging in a certain level of hypocrisy?

MF: No, I don't think so.

M2: What prevents people from saying what they mean and acting how they feel?

MF: Well, we live in a repressive culture. Today, parents are wondering why kids are writing songs about sex. They think "We should ban these songs!" The fact is we live in a world where, if you're a teenager, you're thinking about teenage pregnancy, you're worried about AIDS, you're trying to establish your sexual virility as your only source of self-esteem. It's no wonder so many kids write songs about the glorification of their sexual prowess. It illustrates why there is so much hypocrisy today. We're living in a country where people attack and condemn behavior that everybody's doing anyway.

M2: What do you think would happen if people just stopped fronting, across the board?

MF: [*Long pause*] It's hard to say. Like I said before, when truth has an opportunity to present itself, it rings the loudest. You always see pictures of people in the Midwest who appear to be so patriotic. But, when I go to the Midwest on tour, they're patriotic in the sense that they love their community. They love their family. They love the people around them and they're proud of that, and that's what they consider to be America.

But, when they're presented with the truth about Oliver North or about what's happening in South Africa, they don't say, "Oh, well, we're America, so we're right." They say, "Wow! I didn't know that. I had no idea. That's wrong!" People think folks in the Midwest or the South are backwards, bumfuck types, but they're not. They're just people who have hearts, who care about other people, who have never been presented with alternative viewpoints.

HYPOCRISY IS THE GREATEST LUXURY

M2: So what happens if we achieve this level of honesty and integrity? I think we might degenerate to a state of chaos. I don't know about you, but sometimes I walk down the street and see this little Pekinese dog walk by and I get an impulse to maybe... you know... kick it across the road.

MF: [*Laughs*] I know what you're saying.

M2: I mean, what's the ideal? If we weren't hypocritical on some level, don't you think society would disintegrate?

MF: I don't think so. The Native American people lived in harmony with nature on this continent for twenty or thirty thousand years. They did not destroy the environment or their surroundings. Systematically, we've had a genocide of a native people. We have slavery here. We have total environmental destruction, the ozone layer, I can go on and on…

Yes, the Native Americans had battles between their tribes. But they established the seven nations—America's first democracy. They were able to live in harmony. So that tells me that it's possible.

M2: But do you think that after so many years of repression, you can just allow people to "be themselves" and act on impulse? Haven't the years of repression created a powderkeg situation?

MF: You gotta look at it in realistic terms. "Be yourself," what does that mean? Individualism under capitalism means "Make as much money as you can."

M2: Hallelujah!

MF: [*Laughs*] Capitalism is inherently racist. You have to have people in a lower class and cheap labor. In order to maintain that you have to pit the poorest people against one another. That's racist. Forcing people of different races to fight each other in order to grab the little crumbs that come off the tables of the wealthy. That's how they keep it going. Until that changes you're not going to see people who are living truthfully and honestly.

THAT BILL CLINTON FEELING

M2: Does the man sitting in the Oval Office make a difference in all this?

MF: Not really, but he does set a tone for the country. When Reagan got into office, he set a tone. Before that, you had presidents—even Richard Nixon—who said "Let's have a war on poverty." Even though it was lip service, he was still saying it. When Reagan got into office, he said "Impoverished people are just greedy. They just want fucking welfare. They just want to drive Cadillacs and get money from the government." He made greed fashionable. He made it OK to be a yuppie. He made it OK to have more money than you could possibly handle.

When Bush got into office, he made racism fashionable. He said, "OK, my campaign is going to be based on white people's fears of black men coming into their homes, raping their daughters, stealing, and killing them." He set the tone for what's happening now. That's why David Duke was even allowed to run. Ten, fifteen years ago, if someone from the Ku Klux Klan ran, he would've never had a chance. Twenty or thirty years after the civil rights movement, he's able to do it because of the tone that's been set. When we elect a president, we elect a whole administration—over four thousand appointments. Lifetime appointments for people like Clarence Thomas. But, more importantly, the president sets a tone for how that generation is going to act. So, in that sense, it can make a difference. But, I think Clinton is slightly left of Bush who is slightly left of Hitler. [*Laughs*] M2

Withdrawing in Disgust is Not the Same as Apathy

Cutting Some Slack with Richard Linklater

"Who's ever written the great work about the immense effort required not to create? Intensity without mastery… The obsessiveness of the utterly passive… And could it be that in this passivity I shall find my freedom?"

Okay. Time for a reality hack. Put down this magazine, pop in your car, speed to the nearest video store and rent Richard Linklater's Slacker. *No, really—we're serious.*

Why? Well, for starters, it's a brilliant film. More like a Pachinko game than a film really. Characters bump into each other randomly, events elide into the next fractured vignette or crazed solipsistic rant. It's got the feel of 3 a.m., semi-drunken rambling at a dwindling party—overheard snippets of philosophy, bitching, urban folklore. JFK conspiracy theories folded into sales pitches for Madonna's pap smear; Dostoevskian prose blended into paranoid diatribes about CIA/space alien kidnap plots; fond, anarchistic glorification of tower-sniper Charles Whitman ("This town's finest hour") and the Smurfs as calculated conditioning for the return of Krishna ("It gets kids used to seeing blue people").

Other good reasons: it's dense, quirky and it takes place in Austin. It's about the world of "thought criminals" of all stripes—Hippies, Punks, Cyberpunks—and the underground haven in which they thrive. Nestled into a backdrop of dimly lit coffeehouses, alternative bookstores and backyard rituals, Linklater's ingenues have plenty to say and a conducive forum in which to say it. About time.

by Melissa Petrek and Alan Hines

Illustration by Eric White

In listening closely to the rants and perorations strung together over the film's 97 minutes, Slacker*'s truly seditious nature bleeds through. From the JFK conspiracy to the Masonic foundation of American society, from fear of rejection as the basis of all human relationships, to the very fabric of reality itself ("Time doesn't exist"), Linklater's characters take vicious swipes at the Establishment. It's neither political nor philosophical per se; it's more about searching, questioning,* thinking*—all those things public school was supposed to stamp out.*

Linklater grew up as one of the unfortunate few gifted types trapped in the cultural desert known as the Piney Woods of East Texas. After suffering the requisite slings and arrows from Huntsville Bible-thumpers, he escaped to "a small Texas college" for a couple of years, then dropped out when school cut too much into his reading time. He did a short stint on an offshore oil rig in the Gulf of Mexico—saving up for film equipment—before finding his niche in Austin's artistic underground.

*As the title of his first short film suggests (*It's Impossible to Learn to Plow by Reading Books*) Linklater is entirely self-taught. He founded the Austin Film Society in 1987, wheedled a couple of modest grants and some loans, and in the summer of 1989 with a mere $23,000 to spend, started work on* Slacker.

Remember those 3 a.m. parties? Remember the solitary, quiet dude leaning against the wall taking mental notes? That *was Richard Linklater.*

—Melissa & Alan

It's because I'm from Texas. If I'd been from New York, they would have said "Breakthrough narrative"

We're at Austin's posh Four Seasons Hotel: pristine silk flower arrangements, hushed waiters, braying businessmen. Amidst the pervasive atmosphere of Old Spice and navy pin stripes, Richard Linklater, oddly enough, attracts no special attention. He wears a T-shirt sporting—in precise anatomical detail—an assassin's guide: "Ice pick to back of neck; knife to kidneys; upward blow to sinus cavities; rectum—see guide for detail." His overall appearance is that of the cool older brother your junior high school friends had, the one with all the newest Led Zeppelin albums stashed in his room, still covered in shrink-wrap. His demeanor ranges from innocently observant to gregariously glib, yet his eyes absorb and reflect his surroundings like dark mercury.

MONDO 2000: What's your definition of a "slacker?"
RICHARD LINKLATER: I think the easiest, cheapest definition would be someone who's just lazy, hanging out, doing nothing. I'd like to change that to somebody who's not doing what's expected of them. Somebody who's trying to live an interesting life, doing what they want to do, and if that takes time to find, so be it.
M2: In other words, not adhering to a mold. Creating your own world.
RL: You exist outside the social hierarchy, the consumer society, the world that's pre-ordained for you. It's best to step outside that system altogether and say "No, I'll create my own little slot somewhere out on the margin." And then you can feed off the big system and play off it in your own way. Because that's what's so great about this society—there are little places where you can exist.

CULTIVATE AMBIVALENCE

M2: So you're more interested in experience?
RL: Right. The whole thing is leading an interesting life, and having your time correspond to your desires. It's not like, "Oh, I'm going to work 40 hours a week and wind down from work another 15 hours for my two-week vacation a year." That's so weird. I mean, not everybody's goal is to have a life like that.
M2: That's why all of the characters in *Slacker* come off as admirable, despite the frenetic ravings of mindless work-ethicists. Even people who might have come from this lifestyle seem to view it disdainfully, now that they've "made it."
RL: Yeah, if that was a dark period in their life, they can't see it. If they look back at their post-graduate life and they didn't have a good time, it's lost to them. I think it's admirable. It's not that everyone in *Slacker* is unemployed, it's just that their little slave job isn't what's motivating them in the world.

SHIT SANDWICH

M2: In many ways, *Slacker* is a very dark film—you address such things as a young woman being committed to a mental hospital by her parents, another woman sporting a black eye presumably given by her boyfriend. It isn't exactly the laugh riot some critics painted it to be.
RL: There's definitely a dark edge to it. I went to the London Film Festival and a Greek film critic—this very intense woman—says, "All your demons are floating through this movie." It's true. I was exorcising a lot of shit. But I like that. If you're going to represent that, it's good to put an ironic twist or some kind of humor in the atmosphere. It lightens it up, makes it palatable.

CRAZY WISDOM

M2: Was most of the film based on personal experience?
RL: A couple of things happened to me verbatim. You know the scene with the woman in the coffee shop saying "You should never traumatize women sexually." That happened to me in New York City at this little coffee shop. I looked over at the guy behind the bar mopping up. I was expecting him to say something like, "She's harmless, just put up with her," but instead he goes, "Shhh! Hey, cool it down, buddy!" [*Laughs*]

THE ROOT OF SLACK

M2: One brilliant line in the film that grabbed me was "Withdrawing in disgust is not the same as apathy." That's the whole slacker manifesto.
RL: I had to get that line into the movie. I had it in a scene that got cut, so I worked it back in as a fake Oblique Strategies card. Certain lines hover above a scene that say a lot about everything.
M2: Do you think there's any real communication between the characters? And if not, is it more important just for someone to *be* there to listen to your rantings and nod knowingly?
RL: At that very moment they're not communicating, but the way it works is that you go home, sit down, stare at the ceiling and think "Oh yeah, *now* what that person said today makes sense."
M2: There's another wonderful bit of dialogue about "the immense amount of energy required not to create... the obsessiveness of the utterly passive." It's a summary of the whole concept.
RL: Yeah, it's real background. Nobody ever really talked about it until someone once said "That's the whole film right there," and I was like "Yeah, it really is." In the first part of that scene he's spouting off his Eight Pillars of Euphoria. They're pretty witty. "Opportunistic

Celibacy," etc. The final one is a full-scale, aesthetic re-evaluation where "Bad is Good."

NOTHING HAPPENS

M2: What about the opening scene—your whole theory of tangential realities?

RL: It sets it all up. People say, "What the hell are you talking about? That's a bunch of bullshit."

M2: It's the driving artistic concept behind the film, and what sets it apart. If it was a character narrative, it wouldn't have worked.

RL: If I'd made it five years ago it would have hung itself. You have to distill it all in your mind. I think films fall short because they don't give themselves enough time to gel—to have everything mesh together. It's the perfect structure for the subject matter. Kind of being lost, a lot of information, a lot of rants... The structure came first and the subject matter came over the years.

VERTICAL NARRATIVE, HORIZONTAL REALITY

M2: How did you come up with the structure?

RL: I call it a vertical narrative. It's one of those early ideas you have when you first get excited about any medium. You think about the boundaries. I was driving to Houston late one night and it hit me: "Why couldn't you make a movie which just goes from character to character and never comes back?" Most movies are imprisoned by their own narrative. You're stuck with a few characters and their perceptions. It doesn't account for the many people one person can be. You know someone in real life and they have a lot of different aspects to their personality—that's fine. You see that on the screen and you think "Oh, that's out of character." I wanted to blow that away. I was interested in the cumulative effect of all these people.

M2: It was done in a "God's-eye view."

RL: *Slacker* doesn't make much sense on paper. In a film class, any film professor, any film critic, any producer would have said, "It won't work." But I thought "Here's a movie *I'd* like to see, and I think people who grew up flipping through TV stations could deal with an overload of information adding up to a simple story."

PARIS, TEXAS

M2: One reviewer said you were inspired by European art films from the 50's. True?

RL: The idea for the structure seemed like an original idea at the time. I thought about it for years, but sure enough, film critics came out of the woodwork going, "There was some European film that had a similar structure." [*Madcap laughter*] But they never talk about the form, they talk about the "twentysomething" kids. Even the most informed critics say "Unoriginal style and a bunch of kids that don't do anything." It's because I'm from Texas. If I'd been from New York, they would have said "Breakthrough narrative." Like nothing original can come from Texas. So okay, there were a couple of films like this in the 50's. But it's always some foreign film that no one's ever seen. No one can say that there's ever been an American film with this kind of narrative.

REPRESSED SLACK

M2: Nobody comes away from *Slacker* with the same reaction.

RL: Yeah, old people think, "It's really sad, all these people living in squalor." If you're not inside the culture, it can be pretty wild. The criticisms were more interesting than the compliments, because there was a lot of hostility. You could tell they had rebelled against that "shifty" lifestyle where they weren't really "achieving" anything. They went out to "make something of themselves" and just *hate* people who haven't "got it together" yet.

M2: It's their own personal hang-ups they're projecting...

RL: Yeah, or projecting against who they were only a few years ago.

GENERALIZATION X

M2: Have you read *Generation X*?

RL: Oh, sure. Doug Coupland. He's a friend of mine. We got grouped together.

M2: How would you describe this generation?

RL: [*Bemused*] Well, it's impossible to describe without generalizing. We're playing off a whole different scenario than other generations played off of. It got real old hearing about how this generation had nothing to say, blah, blah, blah. If you're so obsessed about how great things were in your twenties, and Jim Morrison's the rock god of all time, then you own a radio station when you're forty and you still play Jim Morrison. You don't play anything else. Doug articulates that really well in *Generation X*. I really like the format of the book. It's not your typical novel. There were a lot of parallels between it and *Slacker*, in that *Slacker* wasn't your typical narrative film. I really like that there are new forms to be dealt with and that our generation is doing it.

M2: People have tried to label our generation, but there doesn't seem to be a valid label.

RL: We're the first generation that can't be labeled and adamantly refuses to be labeled, because we've tossed off that whole brand of simple categorization. I think there's a lot of tolerance in this generation for whatever anybody wants to do.

That's what's so great about this society—there are little places you can exist

I think people who grew up flipping through TV stations could deal with an overload of information adding up to a simple story

M2: A lot of diversity too. It all has a lot to do with the dissemination of media—television, film, magazines...
RL: That's why this generation doesn't really have spokespeople. Doug and I were on these talk shows and people would say "You're being put up as spokespeople," and we were like "No, no, no, no, no—there are no spokespersons for this generation." It doesn't *want* spokespersons; it doesn't want to be spoken for. I know I don't, and I don't know anybody who does.

WHITE NOISE FOR WHITE TRASH

M2: Let's talk about the new movie.
RL: I have a working title now—*Dazed and Confused*. It's a *Slacker* for teenagers.
M2: Is that your favorite Led Zep tune?
RL: [*Laughing*] It's not my favorite Led Zeppelin tune, but I'm operating at about a 17-year-old mentality right now. Teenagers, I always felt, were pretty smart. *Dazed and Confused* is kind of the moment-to-moment existence of teenagers when they're on their own. It takes place in about an 18-hour period.
M2: Will it be in the *Slacker* format?
RL: I'd call it *Slacker* with about five or six laps—we keep coming back. They're all in close proximity to one another. This movie takes place in '76. I was a freshman in high school. The whole movie is them cruising around, looking for drugs. I mean, nothing *happens* in the movie...
M2: ...except for cruising around and doing drugs?
RL: Yeah, it's the last day of school and there's these sadistic freshman initiation rituals going on. It's a smaller town, so it's weird, but the kids are really smart. There's a lot of ranting. It's like a prequel to *Slacker*. The kids know everything's fucked. They're *stuck*—domestically, institutionally, in every way. [*Laughs*]
M2: In other words, what *really* goes on in high school.
RL: The kids who are reading the script just love it. The teenagers we're casting were like, "Yeah, this is what we did, this is my life, I have to be in this."

DROP-KICK ME JESUS...

M2: So this movie is based upon your own small-town East Texas upbringing?
RL: Yeah, it's based on those types of towns—one high-school towns. There'd always be a group of about 35 to 50 people in these places who knew what was going on in the world. A lot of them are athletes, some of them play football, but they have long hair and smoke pot.
M2: Did you have to deal with all that East Texas fascism—praying before football games, etc?
RL: Oh sure, a lot of national anthems before football games, a lot of praying before and after football games. I even had a team captain—I played football—and how's this for class? You're supposed to pray that you do well and nobody gets hurt, but our captain's prayer was: "Dear God, uh, we pray that we win, and, uh, that the rest don't cheat." [*Laughs*] It was hilarious.

STRANGE ATTRACTORS IN HIGH SCHOOL

M2: This must be a great catharsis for you.
RL: Oh yeah, I'm getting *all* that out of my system. I couldn't have up 'til now because it was such a nightmare that I needed a lot of distance to deal with it. There are people in medium-to-small towns everywhere who'll appreciate this. It's all about being trapped—being on the football team, being part of the masses at school, and trying to be an individual. You spend your time going for those moments when you're outside the group, but all the forces bring you back into the mass. You want to be an individual because you're discovering a lot about yourself, but at the same time you have to be accepted. So it's that raging conflict—you can be different, but not *too* different.
M2: Or you can be different as long as you're as different as everybody else. Is that what happened to you?
RL: Yeah. I remember feeling really weird. Whenever I told people what I was thinking they were always like... [*strikes a wary pose*]. But there's always a few people you rage forward with.
M2: Are there a lot of autobiographical elements in *Dazed and Confused*?
RL: Yeah, spread out over all the characters. I certainly had a night like the one Mitch [*one of the main characters*] goes through. He ends up with the older kids. I see the whole movie through his eyes. That whole world of high school cool. There's so little judgment, it's just, "Oh, that's what the older kids are doing—*cool!*" It's crazy—throwing trash cans at mailboxes, vandalism and being jerks. I like to see it through those eyes—it's what you aspired to be.

SPEAKING THE GROUP MIND

M2: It takes an observant nature to be able to retain this in metaphorical terms and transfer it to film.
RL: Yeah, it's funny how past experience becomes this metaphorical thing. Like the freshman initiation, over the years it's like, "You know, that really meant something." I like it that these kids are so hyperaware. I mean, usually you would never say these things out

loud. Like in *Slacker*, people are saying things you don't normally hear in conversation, but it's what everyone *thinks*, so it seems normal on film. But if you really think about it, people don't always talk like that—they're not so damned conscious. The whole thing's a contemplation of mindsets and thought forms.

there are no spokespersons for this generation. It doesn't *want* spokespersons

KIDS DO THE DARNDEST DRUGS

M2: I can see this movie catching a lot of flak, because there's been a decade-long campaign of ferreting out deviants and shutting them up...
RL: ...and now I'm glorifying them! I'm putting them front and center and holding them up as our heroes! These are the stars of the fucking movie—kids who hate school, hate everything, drink, smoke, ride around... [*raucous laughter*] I can't believe I'm getting away with this!
M2: The film has the potential to be huge. People may rail against it, but it could be massive.
RL: Universal will go, "Good! Controversy! Box Office!" When they interview me and ask, "So, is this what you were like in high school?" I'll say "My only regret about high school is that I didn't do enough drugs. I should have done more, I should have experimented more. I was just a weekend toker. I should have done acid in high school. I'd be much more ahead of where I am now."
M2: There'll be people lying on the ground screaming!
RL: "I should have had more sex and done more drugs... "

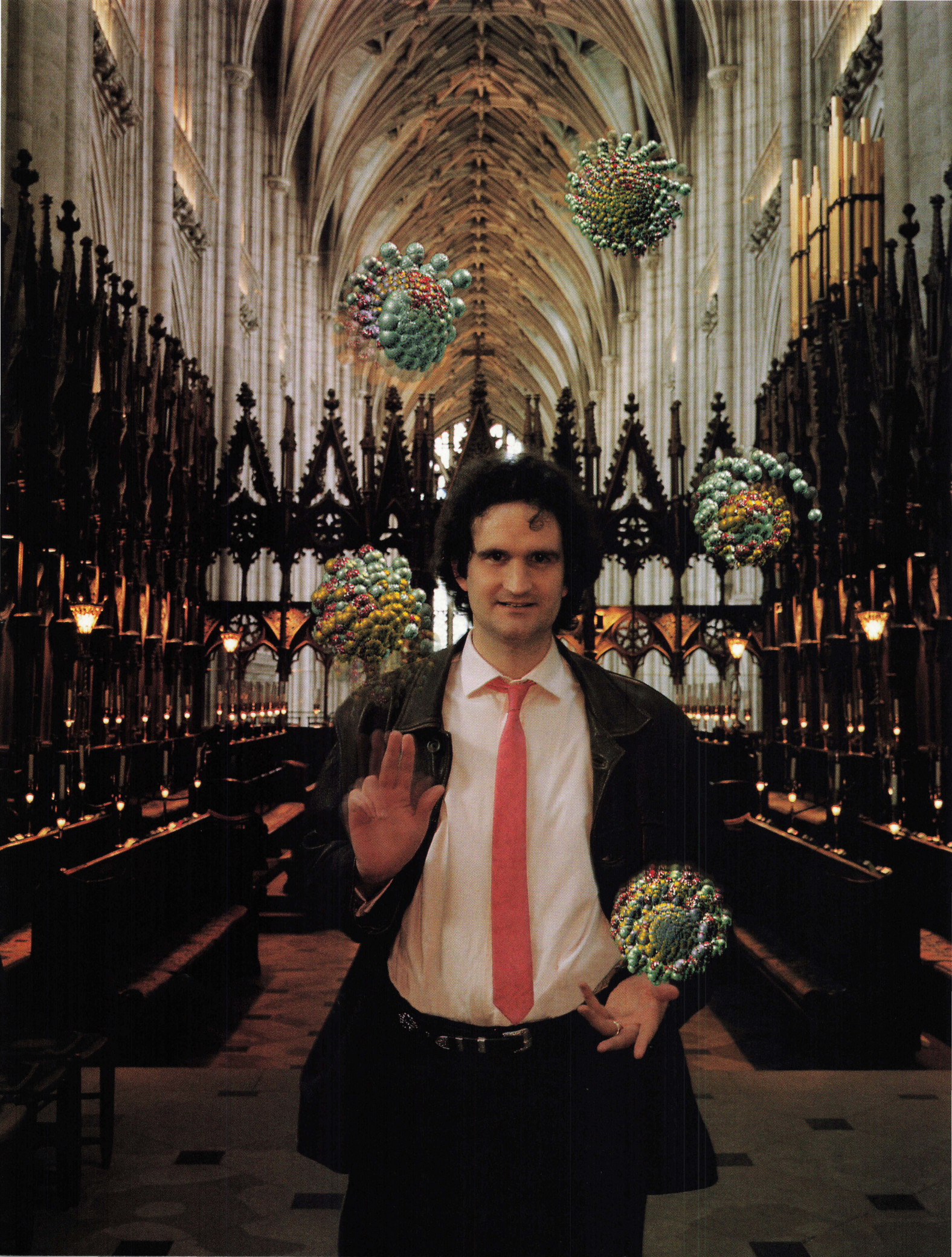
It is 2:00 a.m. and we stumble out of Dobie Theater in a daze, having seen Slacker *for the first time. Some scenes of the film make us squeamish—they strike too close to home—but for the most part,* Slacker *made us all too aware of the naive, esoteric beauty of our subculture. We prowl the main street of the University of Texas campus (the "drag"), down the exact paths of* Slacker*'s characters. Somewhere on the stone walls of the campus's West Mall, there are rifle-shot pock marks. On a bloody Monday, August 1, 1966, ex-marine and certified wacko Charles Whitman calmly swanned into the bell tower and took siege, his head burgeoning with tumors. With an arsenal capable of taking over a small banana republic, Whitman used the campus as his own private firing range, killing 12. Like* Slacker*'s aged anarchist, we know the rifle marks are there. We have touched them and discussed them. Now we say nothing—we can't. We have seen our finest hour.*

It comes at Slacker*'s end, when Linklater's God's-eye view follows a small cadre of friends up Austin's scenic Mt. Bonnell. Frenetically filmed in Super 8 and set to a spry, lively soundtrack, the scene touchingly conveys the underlying joy of living on one's own terms. An instant before a young man pitches his film camera off the cliff in a fit of symbolic abandon, an image of a well-worn book flashes onto the screen—Paul Goodman's* Growing Up Absurd.

It was 35 years ago, and it was the beatnik ethos vs. The Status Seekers *and* The Organization Man. *Paul Goodman recounts asking the future plans of some of the "slackers" of his day—aka the Beats:* The usual answer, perhaps the normal answer, is "I don't know," meaning, "I'm looking; I haven't found the right thing; it's discouraging but not hopeless."

Very rarely somebody will, maybe defiantly and defensively, maybe diffidently but proudly, make you know that he knows very well what he is going to do; it is something great; and he is indeed already doing it, which is the real test.

A test which Linklater has totally aced. M2



WILLIAM LATHAM: GARDENER OF UNEARTHLY DELIGHTS

"Art serves to mirror nature, and reflect ourselves. Through this continuing cycle of creation and recreation, we collaboratively co-create the universe."

—Raymond Lauzzana & Denise Penrose, A Pre-21st Century Manifesto

BY JAS. MORGAN

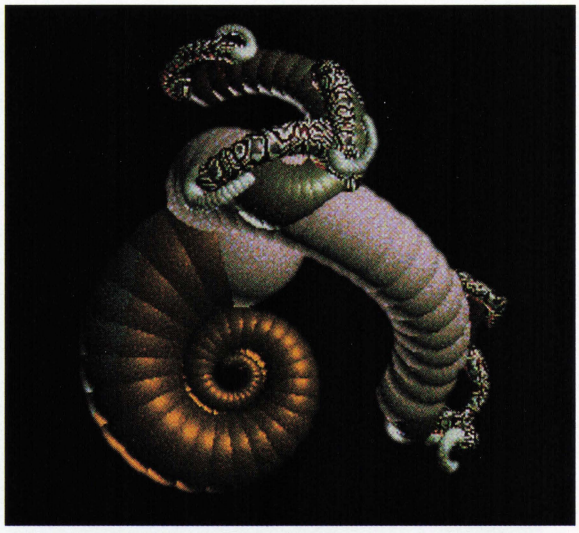


Photo by Bart Nagel, with Heide Foley

William Latham has invented a new style of art called Evolutionism—a synthesis of Surrealism, Baroque architecture, natural world, science fiction and other influences—which gives life to three-dimensional computer graphics. If topology can be intelligent, then what are Latham's artificial life forms telling us about our genetic past, present and future?

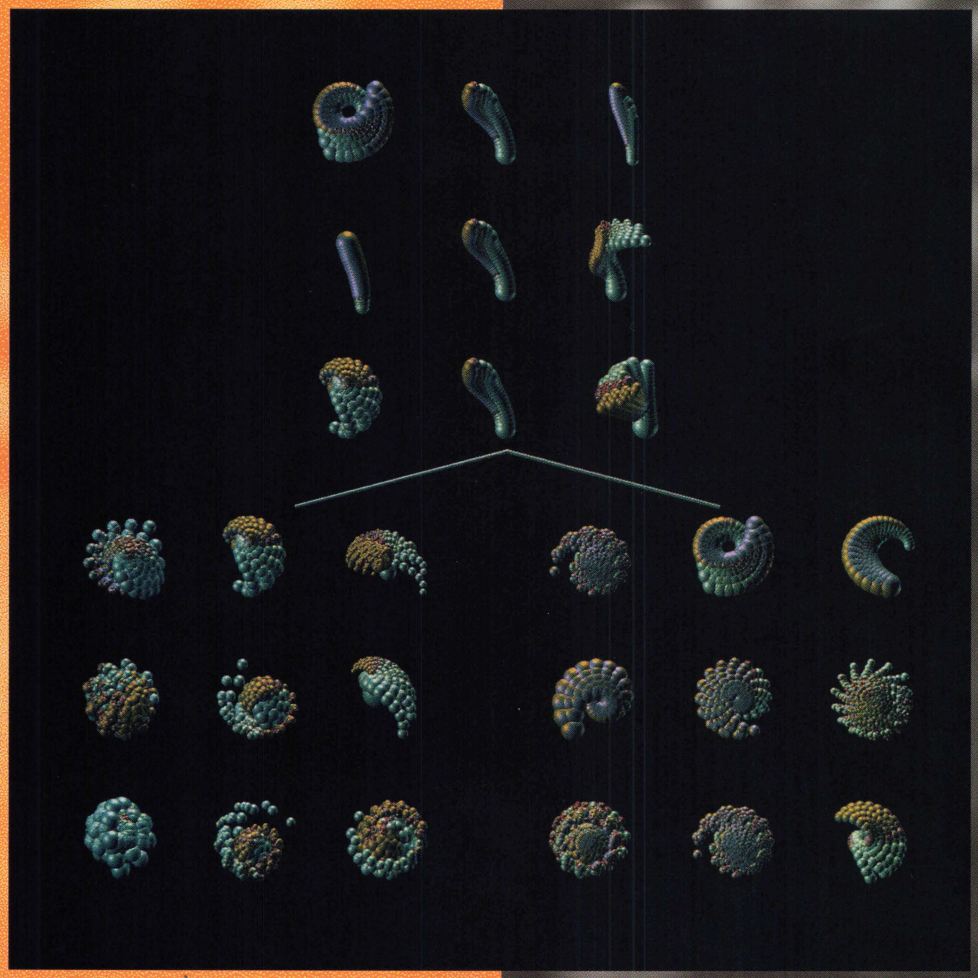
Latham studied Fine Art at the Ruskin School, Oxford, and later printmaking at the Royal College of Art in London. He started working with the concept of evolution in 1984 while exploring the nearby Natural History Museum, where it struck him that sculptural forms could be evolved by applying the dynamics of natural systems. His first experiments in art generation, FormSynth, *were hand drawings on paper which showed how steps of simple operations could mutate basic shapes into myriad complex forms. Realizing the potential of digital technology to exploit his ideas, Latham approached the IBM UK Scientific Centre, Winchester, where he is now a Research Fellow.*

Latham has had many exhibitions in Europe, Japan, Australia and the United States, where his Sequence from the Evolution of Form *opened the Electronic Theater at SIGGRAPH '90. His animated work can be seen in the video collection* The Conquest of Form: The Art of William Latham *(Media Magic, 1990) and his computer techniques revealed in a new volume co-authored with scientist Stephen Todd,* Evolutionary Art and Computers *(Academic Press, 1992).*

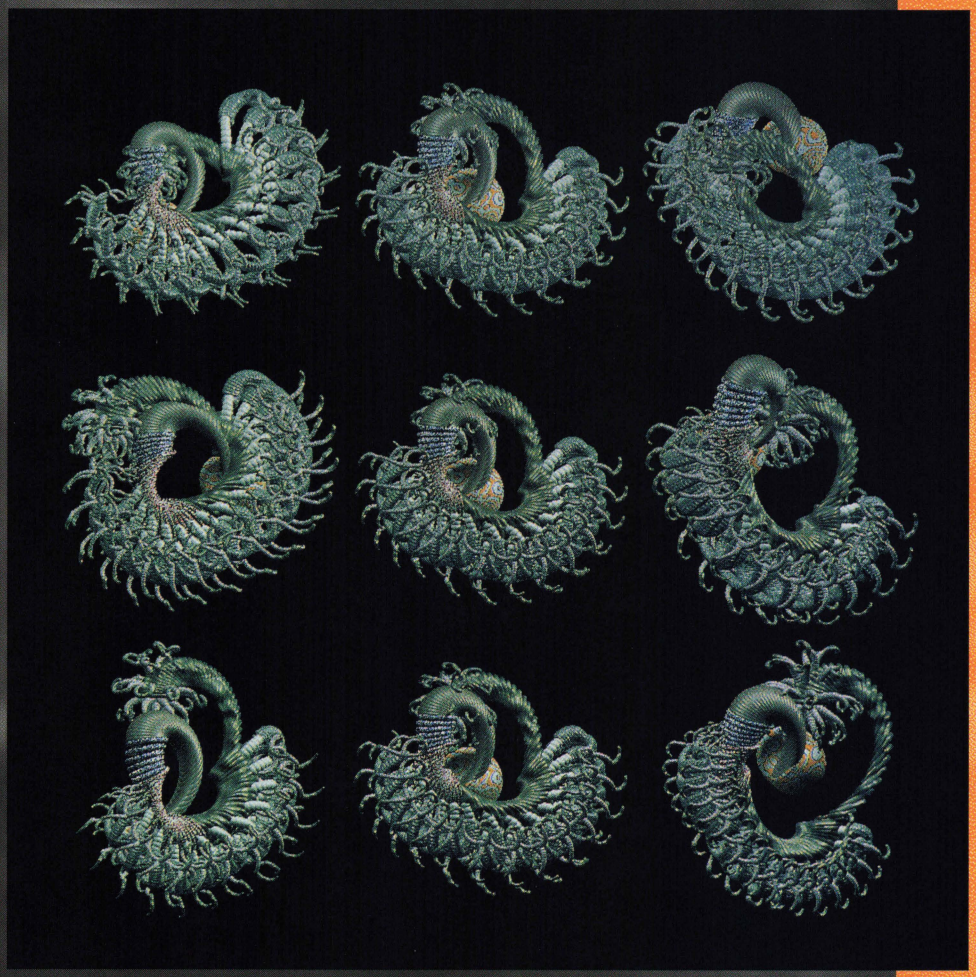
Most recently Latham offered proof positive that the evolution will be televised: "Last Wednesday I appeared 'live' on British Television mutating sculptures being viewed by 5 million viewers. It was quite exciting because I didn't know what forms I would breed. It certainly focused my creative thinking." Thankfully, the software didn't crash.

—Jas. Morgan

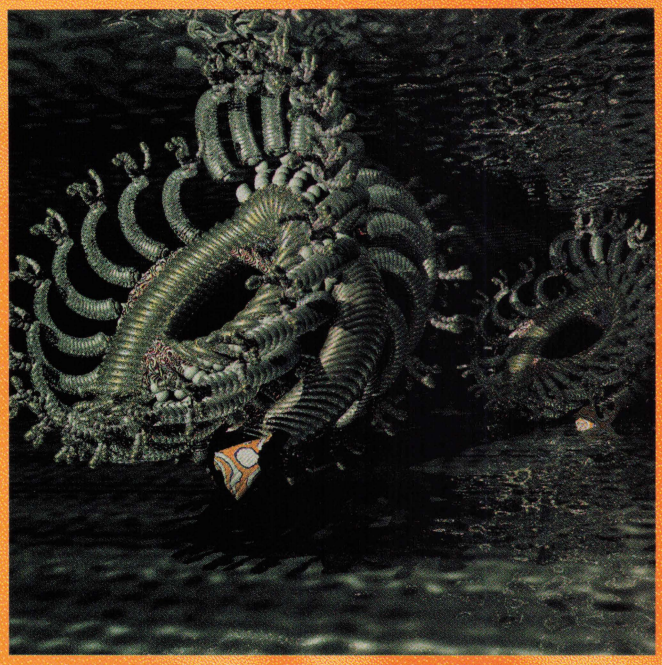
I have created a simulation of evolution for evolving synthetic life, where "survival of the fittest" is replaced by the "survival of the most aesthetic." It's kind of like gambling using an evolutionary "fruit machine." The artistic process has been simplified to such an extent it is like gardening these forms. I select, breed, and marry.

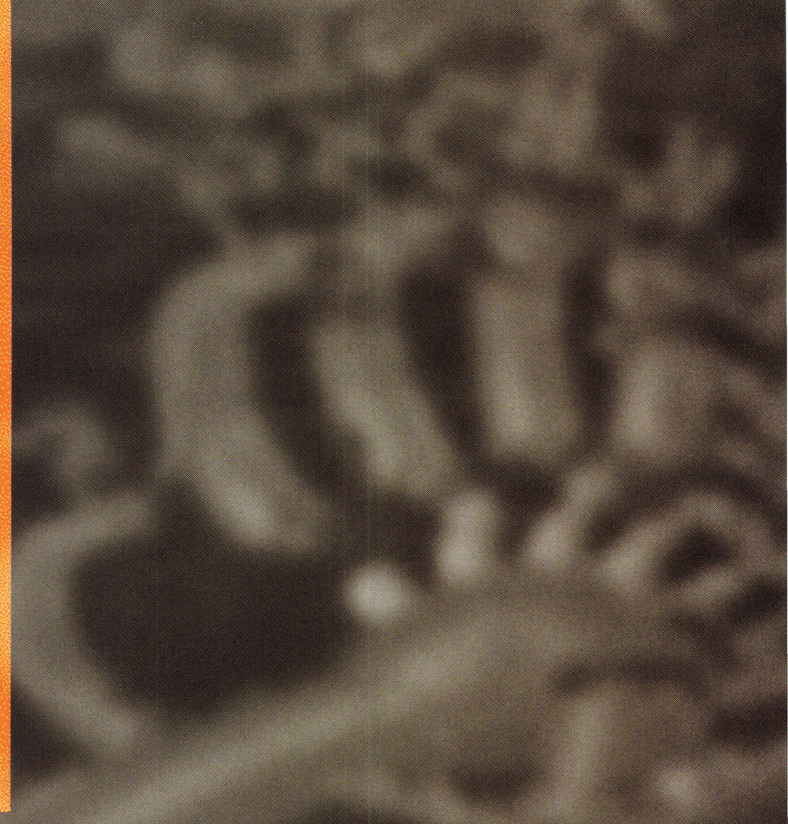


There are no morals in my evolutionary computer world. I "kill," "mutate," "use incest," and "slaughter" families of sculptures; in fact the more subversive the techniques, the more interesting the sculptural forms.



Is it morally wrong to destroy sculptural artificial life forms since they only exist as data? Or is the moral problem that the software could be used for other applications that might not be artistic and then it would be out of your control. As an artist one has to be aware of these moral problems as it is impossible to remain neutral.





As an artist I am in an unusual position in that I am both exploiting science and technology and commenting on science and technology. My work can be viewed as a metaphor for man's relationship with nature through modern technology. I am mutating the types of extraordinary artificial life forms that one day could be commonplace in genetic engineering. So at that point living things could be treated as a form of sculpture, sculptural pet cats. My work is a premonition of that day.

I think the analogy of a gardener trying to breed the perfect rose for a flower show is close to what I am doing. But I am the creator as well. I can go behind the scenes and change the underlying rules of this synthetic nature and then back out as the gardener. What is fundamental to my work is that the evolutionary system is based on my imaginative ideas.

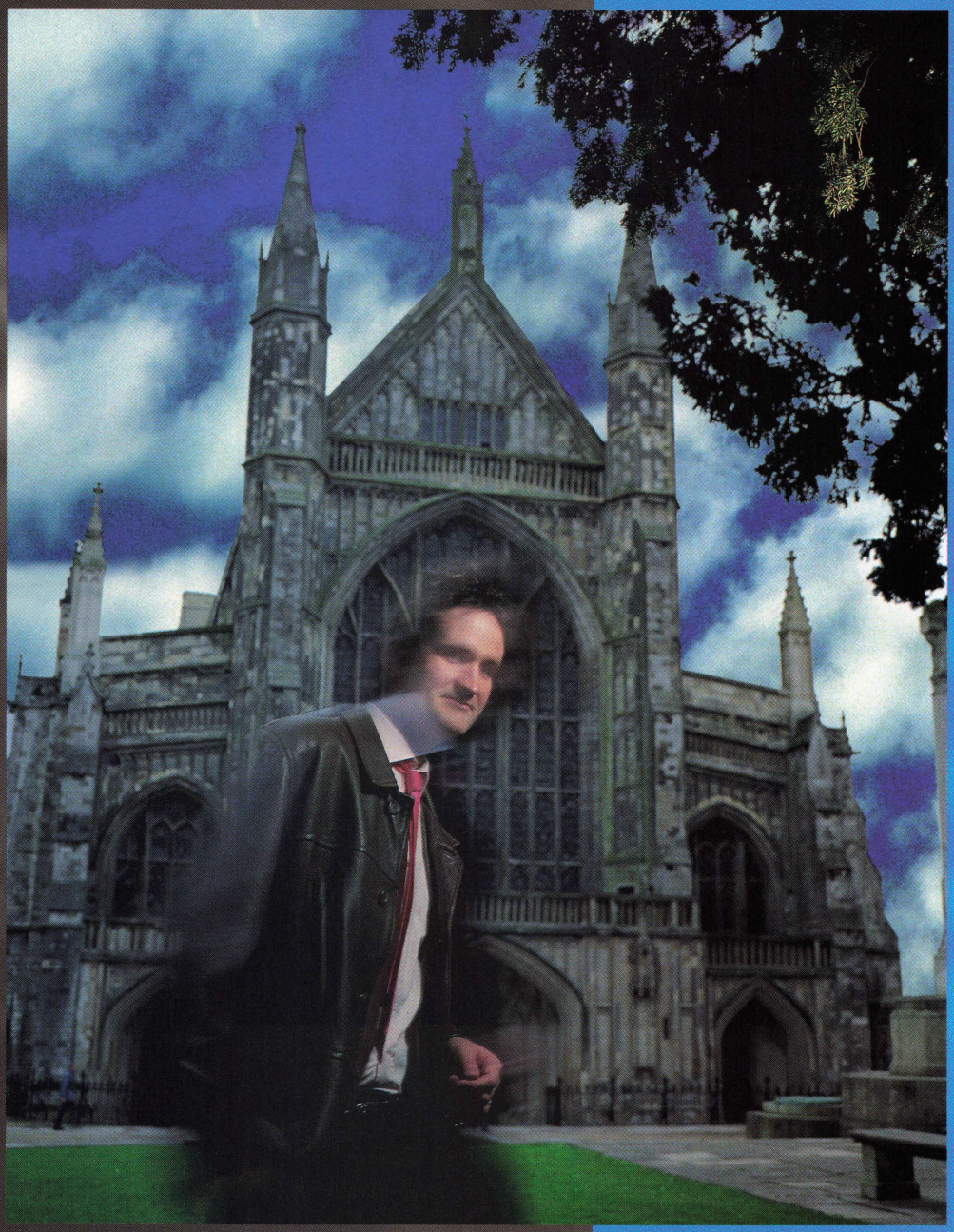


Photo by Bart Nagel, with Heidi Ecker

My work is a blend of human, natural, and machine creativity, and it is becoming increasingly difficult to identify the human authorship; this is making people in the art world very uncomfortable. MP

Vulcan Logic on the Road to Lilliput

Eric Drexler

The French word for dwarf is nain. A nanometer is one billionth of a meter, which is just a bit larger than the diameter of your average atom. Nanotechnology envisions doing things with individual molecules, one at a time. "You done building that roast beef out of dirt yet, Bob?" "Ten molecules down, ten to the twenty-sixth power to go."

Of course nature does build cows out of dirt, with some light, water and grass along the way, so maybe we can learn how to do it. The dream of nanotechnology is to get lots and lots of little machines to build materials for us.

Rudy Rucker

Glen Matsumura

Present day nanotechnology comes in two flavors: dry and wet. Dry nanotechnology is about tiny rods and gears made out of diamond whiskers and the like. The recent discovery that icosohedron-shaped "buckyballs" of carbon can be found in ordinary soot is a big boost for dry nanotechnology. Wonderfully intricate images of possible nanomachines, some resembling automobile transmissions, have been cranked out by Eric Drexler of the Institute for Molecular Manufacturing and Ralph Merkle of the computational nanotechnology project at Xerox's Palo Alto Research Center (the legendary "PARC" where Saint Engelbart invented windows and the mouse).

No dry nanotechnologist has yet been able to assemble the kind of three-dimensional structures that Merkle and Drexler envision. But there is a device known as an STM (for Scanning Tunneling Microscope) which allows nanohackers to see, pick up, and move around individual atoms on a surface. Quite recently, Don Eigler and a group at IBM's Almaden Research Lab managed to use an STM to draw things. First they drew a little man with carbon monoxide molecules on platinum, and then they wrote "IBM" in xenon atoms on nickel. This was a stellar achievement. The next big effort will be to assemble a free-standing three dimensional structure atom by atom—how about a six-hundred-and-sixty-six atom model of Danny DeVito?

An ultimate goal of dry nanotechnology is the creation of an "assembler," a fantastic little nanomachine that can turn out more nanomachines—including copies of itself (called "self-replication"). You might set an assembler to work making assemblers for awhile, and then somehow signal the godzillion assemblers that now they should switch over to making, say, incredibly strong "club sandwiches" of alternating single atom sheets of two kinds of metal. The "grey goo" problem crops up here. What if, like the brooms in "The Sorcerer's Apprentice," they turn everything they can get their nasty little pincers on into more assemblers? The whole planet could end up as a glistering sludge of horny canopeners. But the nanonauts assure us this won't happen; it is perhaps comforting that the main nanotechnology group is known as the Foresight Institute.

Wet nanotechnology proposes that instead of trying to build our own tiny machines, we use a "machine" that nature has already designed: the cellular reproduction apparatus of DNA, RNA, enzymes and proteins. It's like finding a way to tell one of your DNA strands something like, "Oh, next time you copy yourself, could you whip up a few million copies of this particular tryptamine molecule for me as well?" It's all in how you say it, and Dr. Joyce and others at the Scripps Institute are making some slow progress in guiding the "machines" of biological reproduction. But there's still major obstacles in convincing DNA to do technological things like putting together copper yttrium sandwiches... "No, man, I wanna fuck!"

What it comes down to is that dry nanotechnology is about machines that we can design but can't yet build, and wet nanotechnology is about machines that we can build but can't yet design.

The field of nanotechnology was more or less invented by one man: Eric Drexler, who designed his own Ph.D. curriculum in nanotechnology while at MIT. Drexler's 1986 book Engines of Creation *was something of a pop science best-seller. In 1991 he published a second popular book,* Unbounding the Future, *and in 1992, a highly technical work called* Nanosystems: Molecular Machinery, Manufacturing and Computation.

Drexler has a high forehead and the hunched shoulders of a Hollywood mad scientist, but his personality is quite mild and patient. A few years ago, many people were ready to write off nanotechnology as a playground for nuts and idle dreamers. It is thanks to Drexler's calm, nearly Vulcan, logicalness that the field continues to grow and evolve.

Our interview was taped at The First General Conference on Nanotechnology, which was held at the Palo Alto Holiday Inn last November. Despite the name, this wasn't really the first "First Nanotechnology Conference," as that one took place back in 1989. But this was the first First Nanotechnology Conference open to the public, for fifty to a hundred dollars per day, and the public packed the lecture rooms to the rafters.

—Rudy Rucker

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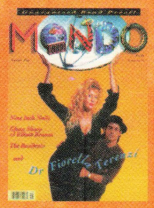

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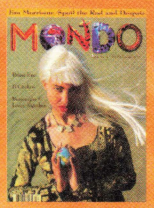

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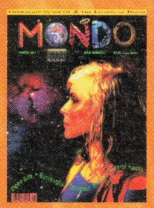

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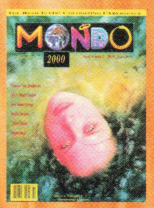

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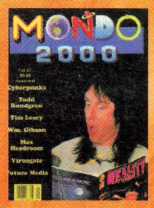

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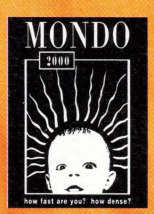

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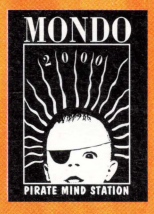

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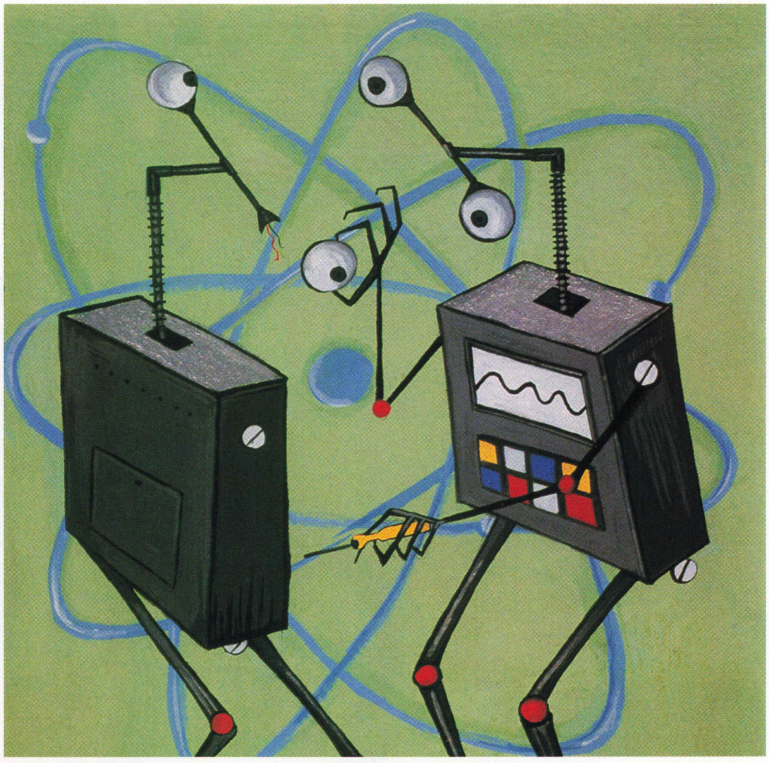
MONDO 2000: Eric, what would be in your mind a benchmark, like something specific happening, where it started to look like nanotechnology was really taking off?
ERIC DREXLER: Well, if you'd asked me that in 1986 when *Engines of Creation* came out, I would have said that a couple of important benchmarks are the first successful design of a protein molecule from scratch—that happened in 1988—and another one would be the precise placement of atoms by some mechanical means. We saw that coming out of Don Eigler's group. At present I would say that the next major milestone that I would expect is the ability to position reactive, organic molecules so that they can be used as building blocks to make some stable 3-dimensional structure at room temperature.

M2: People like to dream of fun things that could happen with nanotechnology, what are a couple of your favorite ones?
ED: I've mostly been thinking lately about efficient ways of transforming molecules into other molecules and making high-density energy storage systems. But if you imagine the range of things that can be done within an era where you have a billion times as much computer power available, which would presumably include virtual reality applications, that's one large class of applications.

M2: I notice that you're speaking on nanotechnology and space tomorrow. Can you give me a brief preview of your ideas there?
ED: The central problem in opening the space frontier has been transportation. How do you get into space economically, safely, and routinely? And that's largely a question of what you can build. With high strength-to-weight ratio materials of the kind that can be made by molecular manufacturing, calculations indicate that you can make a four passenger single staged orbit vehicle with a lift-off weight that's about equivalent to a heavy station wagon, and where the dry weight of the vehicle is 60 kilograms.



It's hard for me to imagine a future in which "nanotechnology" doesn't happen

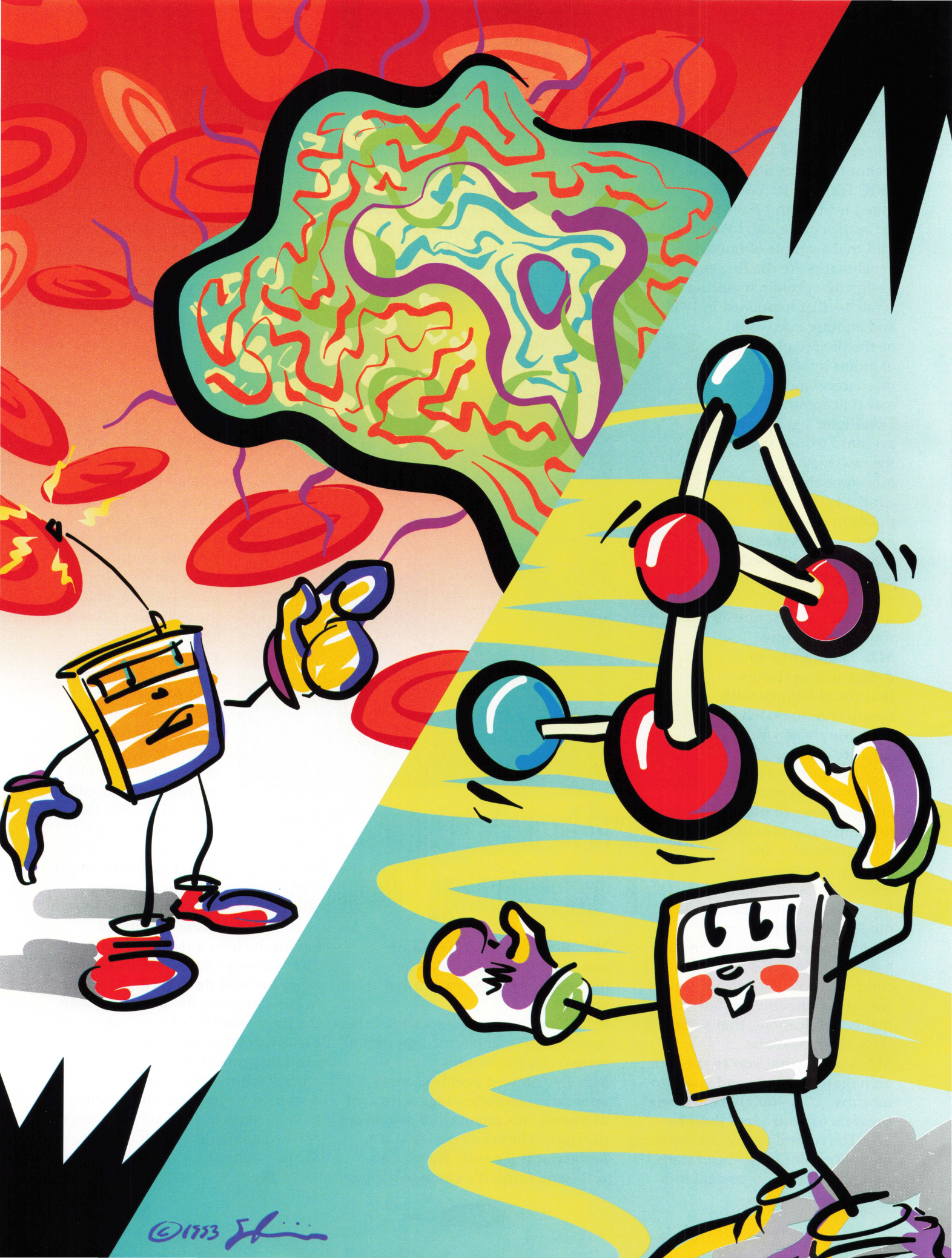
M2: So you would be using nanotechnology to make the material of the thing so thin and strong?
ED: Diamond fiber composites. Also, much better solar electric propulsion systems for use in orbit.

M2: I've noticed people seem to approach nanotechnology with a lot of humor. It's almost like people are nervous. They can't decide if it's fantasy or if it's real. For you it's real—you think it's going to happen?
ED: It's hard for me to imagine a future in which it *doesn't* happen, because there are so many ways of doing the job and so many reasons to proceed, and so many countries and companies that have reason to try.

M2: Could you make some comments about the notorious grey goo question?
ED: In *Engines of Creation* I overemphasized the problem of someone making a self-replicating machine that could run wild. That's a technical possibility, and something we very much need to avoid. But I think it's one of the smaller problems overall because there's very little incentive for someone to do it. It's difficult to do, and there are so many other ways in which the technology could be abused where there's a more obvious motive. For example, the use of molecular manufacturing to produce high performance weapons systems which could be more directly used to help with goals that we've seen people pursuing.

M2: I've heard about people injecting nanomachines into their blood and having it clean out their arteries. That's always struck me as the *last thing* I would do. Having worked in the computer business and seen the impossibility of ever completely debugging a program, I can't imagine shooting myself up with machines that had been designed by hackers on No-Doz.
ED: In terms of the likely sequence of developments, I think it *is* one of the last things that you'd expect to see. M2

Maria Gibert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THE NANOTECHNOLOGY CONFERENCE
INTERVIEWS, NOVEMBER 1992

The Road to Lilliput is Paved with Good Intentions

If you've read Great Mambo Chicken, *then you probably already know everyone at the First General Conference on Nanotechnology. If not, suffice to say they were an interesting crew of true pioneers, sober scientists, hardware hackers, biologists, VCs, L5 refugees, and wide-eyed groupies.*

There seems to have been a conscious effort to recreate in staid sleepy Palo Alto the seminal atmosphere of the First Artificial Life Conference at Los Alamos in September 1987. This was the First General *Conference on Nanotechnology, sponsored by the Foresight Institute, and marks somehow its debut into the forebrain of mass culture.*

—*Dallas Brother*

Dallas Brother

Marcus Badgley

QUESTION FROM AUDIENCE: What about the economic aspects of nanotechnology, that is, you mentioned taking a box, making a copy and giving it to your neighbor. That seems very similar to taking a floppy and copying software, which is already causing us a lot of economic problems in the software industry. Have you thought much about how this industry [nanotechnology] could work?

ERIC DREXLER: Not as much as I should have. It is possible to do really good copy protection—i.e. put the very fine machines inside a barrier so you can't get at them. So if you have a box, it is really only possible for it to do what it's programmed to do. It's not necessary for things to be reprogrammable in order to be useful, like the Macintosh, for example. These things could be very inexpensive—setting aside things like taxes, insurance, licensing, and so forth. More generally, these things are imponderables from a technological point of view.

MONDO *put some hard questions to the elder statesman of robotics and AI, Marvin Minsky, who was Eric Drexler's advisor at MIT. Evidently Minsky was a stand-up comic in a previous life.*

MONDO 2000: How was Eric able to get MIT to put "nanotechnology" into his doctoral title?

MARVIN MINSKY: [*muttered comments from offstage*] That's a short story I won't tell, but I had to change his department in order to do it. [*laughter*]

M2: That's a hack!

MM: Yeah, we had to get control of the dean. [*laughter*]

M2: Do you expect the development of a hacker culture in nanotechnology?

MM: Now, there's good hacker cultures and bad cracker cultures. I anticipate the dreadful emergence of all possible bad things. It's a very large, bad planet. We joked this very morning about quasars—which are galaxies that're exploding because something bad happened in there. Actually, a lot of those are high school science projects. [*laughter*] You can't top that.

Later in the afternoon, we cornered Ralph Merkle from Xerox PARC and the Institute for Molecular Manufacturing.

MONDO 2000: Are you familiar with the International Core Wars Society? They had a few people at the first A-life Conference. There are self-replicating [S-R] computer viruses a *lot* smaller than 500K [bits].

RALPH MERKLE: Well, it depends on the environment. If you structure the environment appropriately, S-R systems can be very simple. The classic example is given by the NASA study of a series of robots without fuses, but each was holding one in its hand. As each was turned on, it stuck the fuse in its neighbor, turning it on. You've put all the complexity of self-replication in the environment.

M2: Yeah, like dominoes.

RM: On the opposite end, for a macro scale self-replicator, NASA estimated 100Mbits of information and 100 tons of mass, give or take a couple of orders of magnitude.

M2: I would *give* a least a couple.

RM: What you really want a general purpose device for is to produce other useful things besides itself at low cost. An engineered device, such as a car, can perform the same function as a natural organism which reproduces itself, such as a horse, but at the price of being less robust and general purpose, and requiring a single highly refined source of energy, gasoline. So you can have a simple device, easily designed, which does its job economically without requiring self-replication.

M2: But a horse is also produced with relatively unskilled labor.

RM: Right.

M2: And isn't cost ultimately a function of human labor? If no *human* labor input, then no cost.

RM: Well there's the cost of energy, the cost of materials.

M2: Not if they're extracted by machine, too.

RM: Some of the more enthusiastic researchers at the A-Life conference want to dive in and deliberately design systems that can evolve into other things. If you're doing that in a computer, fine. In the real world, I think it should be very carefully considered. I don't mind as long as the devices can't make copies of themselves. But the moment you're dealing with a technology which is capable of replicating itself in some fashion, then I think you *do* need regulation, you do need an international framework. This could be a very big problem, though I think the grey goo problem has been exaggerated.

M2: Referring to the idea of broadcasting power via acoustic waves, could you instead deliver energy to these devices with a continuous wave X-ray laser focused on absorber elements?

RM: The problem with X-rays is you start breaking chemical bonds.

M2: But you need the huge bandwidth the laser provides. Otherwise, these gigahertz robots spend most of their time sitting around waiting for instructions.

RM: So they sit around. There's a lot of them, and they work very fast, so that's not a problem. You can get information from a very long pressure wave, like a buoy on the ocean. I agree, from the point of view of the robot, the baud rate is very low. But energizing the medium acoustically is a great way to provide power.

M2: But Eric's replicator in a shoebox is working in vacuum (no media).

RM: Well, there are other means of transmitting power through the structure of the box which haven't been explored yet. Read the book. [*See* **Nanosystems** *by Drexler.*]

M2: At the dawn of the industrial era, very few people considered the impact of coal-fired steam engines other than technically. Looking back, really, 99% of the impact was social.

RM: I agree. With this technology most of the impact will be social. What should we do? What should we not do? These are *not* technical questions which will be answered by a small elite band of technologists. That's not how it works.

M2: That's how the Manhattan Project worked.

RM: Those are social questions that concern what people want, and how they'll participate.

M2: And if they don't participate, well—at Hackers, one famous crypto expert said: there's always the Crips and the Bloods. Even poor people now are incredibly wealthy compared to 16th century royalty, say, in terms of their access to resources. Imagine 21st century gangs.

RM: In some very real ways, medicine hasn't changed since the 16th century. You catch diseases and die, there's plagues, malnutrition. Look, with this technology, you could feed and clothe everyone adequately, and keep them in good health with nanotechnology-based medicine. That's not the whole solution, but it sure helps. No one has to be left out.

M2: Have you read Charles Sheffield's novel, *Cold as Ice*? There's one funny line in it which goes, "Fishel's Law and Epitaph:

SMART IS DUMB—It is unwise to build too much intelligence into a self-replicating machine."

RM: Yeah, I can go with that. It would be extraordinarily dangerous. It's unlikely that a self-replicating machine will be built by accident, because it's too complex. It's also unlikely that one will be built as part of a specific product either because of its needless expense. So, as long as we're dealing with economic motives, it probably won't happen. But if there's malign motives...

M2: Yeah, fortunately most sociopaths are not too bright, or educated enough, though.

RM: Again I emphasize international cooperation and regulation. You can't ban nanotechnology in one area with repressive legislation, and not in another. When people are aware of the benefits, they'll try and develop it anyway, so you need a open climate for researchers.

M2: Will nation-states survive the nanotech transition—which may in fact fulfill Vinge's idea of the Singularity?

RM: There will be more opportunities for individuals to pursue their own ends and be less dependent. But there will also be opportunities for large-scale cooperation of large projects. Space exploration. Suppression of armed conflict.

M2: Are you guys staying away from mentioning cell-repair machinery? Since you're trying to have a serious conference?

RM: Medical applications *are* reasonable. Most medical problems are caused at the cellular level. I can imagine targeting nanorobots at specific organ cancers and directing them from outside the body.

M2: At what point can the nanotech genie be put back in the bottle, with government repression if necessary? Are we beyond that point?

RM: A large number of people know about this technology and the potential benefits. I'd say that if your objective is to prevent its development, then you have no chance at all; but if your objective is to guide it, then you have an excellent chance. Especially today while the field is young and the people working in it are few. If you want to have an impact and influence, jump in now.

Finally, we cornered K. Eric Drexler to talk about greater threats and further horizons.

MONDO 2000: What percentage do you assign to the probability of total militarization of this technology?

ERIC DREXLER: There are other threats which have a greater *relative* probability. In terms of the absolute probability of things going down the tubes via a nanotechnological process, I just don't know, it depends on what we do. It depends also where the public is when this becomes an issue for polling.

M2: How do you feel about life extension? In the interests of seriousness, is it a topic you wish to avoid?

ED: Oh, boy. [*sighs wearily*] God, yes. I think life extension has been shown by long experience to be a subject that generates a remarkably large amount of heat relative to the amount of light in most discussion. The potential of instruments that are matched in size to the cellular scale for improving health and thereby extending life span is enormous.

M2: Why isn't anyone working on it?

ED: It's not the best focus of attention for this technology right now—in part because it's one of the most ambitious and difficult applications of the technology base involving interaction between molecular machine systems and the most complex physical system in the known universe.

M2: How different would your life be right now if the L5 Society had succeeded in its goal of Lagrange-point space colonies? (That's speaking as someone with a single digit L5 membership number!)

ED: Let me answer that by answering a different question. If molecular nanotechnology were well on its way to succeeding, I would be doing something else now.

M2: Do you think nation-states or organized governments can survive the nanotech transition—which may well fulfill Vinge's idea of the Singularity—and what about other institutions?

ED: I would say that *unless* we can find some way for organized systems that provide some of the genuine services of governments to survive the transition, we're going to be in a lot of trouble.

M2: Vinge's novels, *The Peace War* and *Marooned in Realtime*, struck a chord. I wasn't aware 'til recently that he's considered a radical libertarian.

ED: Don't forget "The Ungoverned." It's a short story or novella sandwiched between the two, and introduces the main character of *Marooned*. It's set in a working anarchist society.

M2: The power of contract was the one thing that did survive.

ED: Hmm. It'd be nice if there was more power of contract than there is. Sumner Main in his book, *Ancient Law*, wrote that the history of the progress of the Law has been the history of the progress of contract over status. This was over a hundred years ago. I'd add that the history of the regress of the Law has been regress from contract to status.

M2: Hmmm. I read somewhere that good law is simple because it's self-evident, and complicated law is bad law because it's contradictory and confused.

ED: And even if it isn't self-evident, at least it's something you can follow because it's public. I think, more important than that laws be just or fair, is that they permit a very, very wide range of activity and be clear, so that you can stay free of the mechanism of the courts and punishment.

M2: Now you're preaching to the choir. Can you think of other institutions which are vulnerable during the transitions? The whole battle with communism was over the ownership of the means of production. What happens when your home "Mr. Replicator" frees you from the need to be a member of society?

ED: I can just imagine. The Law of Unintended Consequences has a lot to say about that.

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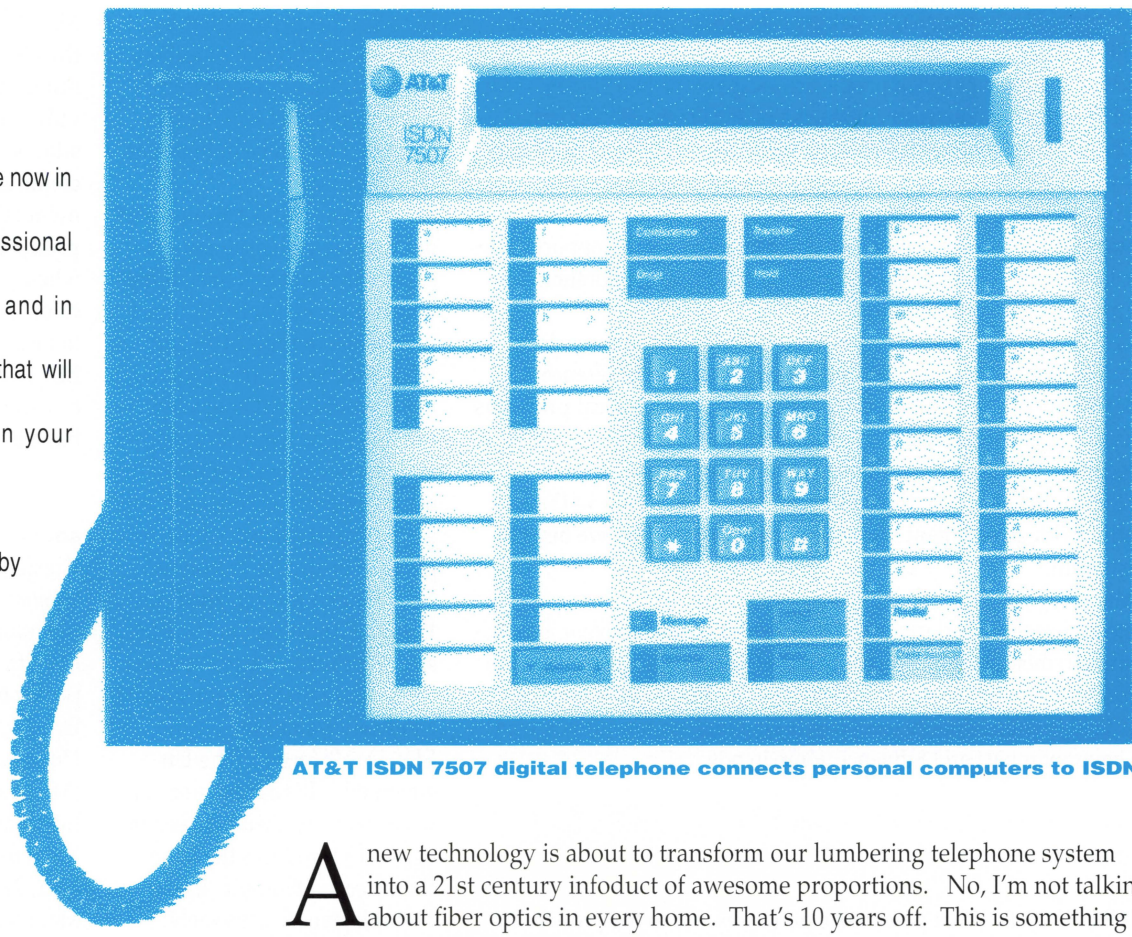
Dallas Brother is a robotics engineer working in the military-industrial complex. Pseudonyms mean never having to say you're sorry, and never getting broiled in flame wars, thank you. M2

ARE YOU ISDN-AWARE?

Decisions are being made now in high places—by congressional committees, the FCC, and in corporate boardrooms—that will have a major effect on your communications future.

Closeted decisions, by special-interest and bureaucratic cabals, that will affect how you live and work and relate to your fellow hominids. These are decisions that are *too important* to leave to the brain-dead, profit-hungry, or efficiency-minded. There are warring factions in government and big business that are playing jackstraws with your future. It's time to get ISDN-aware!



AT&T ISDN 7507 digital telephone connects personal computers to ISDN

A new technology is about to transform our lumbering telephone system into a 21st century infoduct of awesome proportions. No, I'm not talking about fiber optics in every home. That's 10 years off. This is something *here today* that fills a niche between between an ordinary modem and the highly-sophisticated communications options available to big business and the so-called "public sector."

It's called ISDN, or Integrated Services Digital Network, and it's already available in major cities in the U.S.—*on the existing copper wires that run to your home and business.* It will create a high-speed communications net that will allow you to communicate and publish multimedia, video, graphics, and text—*globally.*

Our language lacks a term to suggest the power and scope of this development. To put it succinctly: species connectivity is about to get a major upgrade. John Perry Barlow tried valiantly to put it into words: "ISDN is the physical wiring of collective human consciousness—the idea of connecting every mind in full-duplex broadband."

Imagine a telephone line that carries data 27 times faster than your modem. You could send a 1000-word newspaper article in less than one second. Or a five-second simple animation sequence or a killer guitar riff. Or use both your modem and fax simultaneously over the same line you're talking on. No need to install three separate lines.

The Electronic Frontier Foundation has called ISDN "a vibrant web of information links" that will serve as the main channels for commerce, learning, politics, and entertainment in the future.

Vibrant web? What inspired such purple prose? Very simply, the notion that *everyone* can become, potentially, an online multimedia producer over an ordinary phone line. Or at least

communicate affordably at a broader bandwidth, with text, graphics, and sound—options formerly available only to the big boys. "The mythic world of the discarnate, disembodied intelligence: you *can* be in two places at once," McLuhan said of the telephone. He would have *loved* ISDN.

The infoduct is here now. No need to wait for the year 2000 and the fiber-optic "information superhighway." Businesses and homes throughout Japan and Europe are connected and they're already in the 21st century. If you aren't, that's because your phone company doesn't understand new media.

This is a technology born of frustration. If you've ever tried to send a large file by modem, you know the problem: it takes forever to send. Line noise can even stop a transmission dead. Those millions of miles of ancient copper telephone wires were intended for narrowband voice, not data.

Your nice clean computer digital (on/off) signals must first be converted by a modem (modulator/demodulator) to dirty (noise-prone) analog tones for transmission over these wires. And under ideal conditions, analog transmission only works at up to 19 kbps (kilobits per second) or 19,000 bits per second or so—often far less with noisy lines.

ISDN is the solution. It's available now from your telphone company but is still almost unknown. It whisks data along at a blistering 64 kbps—27 times faster than an ordinary 2400 baud modem. And it works over your existing two-wire copper telephone line (with some conditioning in your local telco central office)—no expensive new cable or fiber optics required. Plus it's all-digital end to end, so your computer doesn't have to slow down to retransmit data scrambled by line noise.

Access a friend's computer 3000 miles away on an ISDN line and it feels like the two of you are magically sharing files on the same giant local area network. Dial the number and the call goes through instantly. The same phone line can carry voice and data simultaneously. Large graphics files zip between computers in a few minutes instead of an hour.

Wes Thomas

So why are we still mucking around with slow-poke modems, you ask? Lack of standards and telephone company autism. ISDN has been available from the RBOCs (Regional Bell Operating Companies, such as PacBell and NYNEX) for years, but each phone company has had its own peculiar ISDN standard. They couldn't talk to each other—and they couldn't explain it to the rest of us.

Meanwhile, countries like Germany (1/2 million ISDN subscribers) Japan (300,000), England, Australia, and France (40,000) have quietly made ISDN available on most of their phone lines (since 1988 in France). They've left the U.S. behind in their jet wash as they accelerate into the 21st century, with all the economic advantages of instant information. Are you ready for third-world standards of living?

Now the good news: at a major international event in November, the U.S. telcos (telephone companies) and the equipment suppliers announced they have finally got their act together: the new worldwide National ISDN-1 standard. It's already implemented in 35 cities around the country. That means you'll be able to connect to anyone else who uses ISDN without worrying about compatibility.

But enough of this nerd-speak. We're talking increased connectivity, remember? The French people knew where to apply this new technology: *flirting*. When the French government telephone company handed out millions of free Minitel home terminals to access its "information service," they were shocked to find people were *really* using them mainly to flirt. Undoubtedly one of the biggest applications will be personalized dating services and customized erotica. And ISDN will make it even more interesting with such niceties as online videoconferencing and Macintosh QuickTime video personals.

ISDN: Q&A

WHAT CAN I DO WITH IT?

You can use an ISDN line just like you do a *regular* phone line: call people up, send a fax, use a modem to access a BBS, etc.—except that you can do all these things at the same time. But to take advantage of ISDN's power, you have to call someone (or some computer) who also has ISDN. Which makes it possible to do high-speed interactive screen-sharing, video conferencing, and send/receive graphics, text, programs, etc.

There are two types of ISDN. Let's forget the corporate PRI (Primary Rate Interface) at about a $1000 a month. You're interested in the more affordable "Basic Rate Interface," or "BRI." On just one two-wire ISDN phone line, you can get three simultaneous channels, believe it or not: two 64 kbps channels and one 16 kbps channel, used for "signalling" (dialing up a number, for example) and packet data (for linking computers via packet data networks, such as Telenet). This is called 2B+D.

Depending on the equipment you're using (such as an ISDN "terminal adapter" plug-in card or add-on box for your personal computer), you can do a lot of fancy tricks with these three channels. For example: talk on one B channel while you simultaneously send or receive computer files on another B channel and send or receive another file via packet data on the D channel. All on one phone line! Or if you have a special "key set" (special phone with many buttons), you can save money by having multiple "virtual lines" on just one phone line.

AT&T ISDN 6508 Key Telephone: a PBX from just one phone line

WHERE IS IT AVAILABLE?

If you live in a large city, your chances are fairly good. As of January '93, ISDN is accessible by some 15% of the 140 million phones in the country. Coverage is still limited mainly to business areas, but you *can* install ISDN in your home office as a business phone.

In the San Francisco Bay Area, about 65% of all phone lines have access to PacBell's "CENTREX IS," their name for ISDN service—80% of all phone lines in Silicon Valley. There are 35 central offices (buildings that house a telco "switch" computer) that offer ISDN. If you live within 18,000 feet of one of these COs, you can plug in. Otherwise, forget it: you can spend up to several thousand dollars *plus* up to a few thousand a month for specially-wired "Extended IS" lines.

Note: you can send at 64 kbps in your local area (within 18,000 feet of a central office), but only 56 kbps to another area. The phone companies promise to fix that soon.

HOW MUCH DOES IT COST?

With the phone company, you've got installation charges, monthly charges, and per-minute rates to consider. Plus equipment purchases.

Installation charges vary by state and RBOC (Regional Bell Operating Company). In the Bay Area, you pay PacBell about $635 for installation (if you already have "Centrex" service for your business, it's only $150). Plus $45.15 per month for the lines and per-minute charges at normal voice rates. This gives you two physical lines: an analog "Centrex" line, which offers some advanced phone features, and an ISDN 2B+D line—a total of three virtual lines. This will get cheaper in early '93, when the tariff loosens up, allowing you to install just one line.

ISDN only costs a telco about $7.50/mo., according to the Consumer Federation of America, but ISDN prices range from reasonable (New England Telephone charges just $13/mo. for a home ISDN line) to ridiculous ($100 a month). There have been charges of "piracy!" and some telecomm mavens believe there's no justification to price the service higher than regular voice lines.

Lotus Corporation founder Mitch Kapor is working through the Electronic Frontier Foundation (EFF) and congressional hearings to enlighten policy making on ISDN and bring down costs. If costs are too high in your area, call your state's Public Service Commission and demand affordable rates.

You'll also need to spend about $300 or so for network interface equipment and $1000 to $2000 for computer peripherals. If you just want an "ISDN-aware" telephone, without computer connections, it will cost about $250. This gives you some of the features you'll find with business PBX systems, such as six-way conference calls and other tricks. There are also some ISDN-aware phones with computer connections. These run about $700 to over $1000 and should turn up soon in AT&T phone stores.

How do I get it?

First, I can almost guarantee your local phone company business office hasn't heard of ISDN. It also has different names (such as Centrex IS in California). Best bet: call the main office of your Regional Bell Operating Company (such as NYNEX or PacBell) and ask for the ISDN Product Manager.

These things can be user-hostile; to buffer you from telcospeak, you may want to hire an ISDN systems integrator. One such is Business Link in New York: they can help you connect with the phone company, and customize a turnkey package of ISDN equipment and software for your particular needs. They may also provide special services, such as remote desktop publishing.

You'll need to make your personal computer compatible with ISDN. You need a terminal adaptor (TA), which connects the computer to the phone line and comes with ISDN communications software. You can get one from Fujitsu for about $400. Hayes sells one for $1199 with Mac and PC software, including Hayes SoftFone voice call management software, which provides call screening and logging and other nifty features.

To take full advantage of the 64 kpbs speed, you'll also need special "ISDN-aware" communications software, such as Hilgraeve's HyperACCESS/5 v. 2.0 for DOS, Windows, and OS/2 ($199). ManyLink's ManyLink for ISDN ($149) allows you to make eight simultaneous data calls.

If you have a local area network (LAN) in your office or home, you can connect it to an ISDN line so all network users can share the ISDN line. This requires a router. For the Macintosh several routers priced under $1000 are available and work with the Mac's LocalTalk or Ethernet networks. Make sure they work with your terminal adapter. For PC networks, it's more expensive. Novell sells NetWare Access Server for $2395, also Hayes TA-compatible.

What about privacy?

The FBI reportedly isn't too happy about ISDN because they can't tap into your phone wires as easily if you're transmitting digital signals. With their proposed Digital Telephony Amendment to the Communications Act of 1934, they would get around that by requiring telephone companies to modify their switching computers (along with other digital communications systems) to make them easy to wiretap directly. But with the right data encryption algorithms, such as RSA (which the NSA is seeking to suppress, so they can monitor everything), you can make it almost impossible for snoopers to decode your transmitted information.

What's the competition?

There's only one other affordable high-speed communication service available from telephone companies. It's called "Switched 56." It's limited to 56 kbps communication speed, is limited to data, and typically priced much higher than ISDN.

What's coming in the future?

Lower rates for ISDN, lower equipment costs, and broader availability of ISDN service. By the end of 1994, over half of all phone lines in the U.S. will have ISDN, says Bellcore (formerly Bell Labs).

ISDN computer add-on cards and software will be bundled with personal computers for real estate pictures, remote medical diagnosis, etc. Call-management software on computers linked to ISDN lines will keep track of calls, transfer calls, do automatic billing, and even take messages for you. Low-cost ISDN-aware telephones with smart answering machines and computer interfaces will appear.

Cable TV systems will offer interactive video services using ISDN. You could respond to a TV program with your computer, which would be linked to your cable company via ISDN. You could "vote" on the outcome of an interactive movie or express opinions that could be polled in real time and displayed on a talk program—as in Perot's Electronic Town Hall.

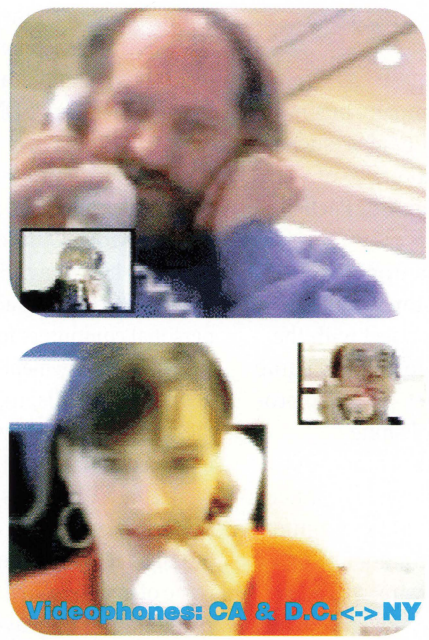
In the future, broadband fiber optics will bring high-quality interactive pictures and sound to every home and business. But we have to ask ourselves: should we spend hundreds of billions installing fiber optics everywhere?

What about the multi-gigabit "information superhighway" that Gore, the National Science Foundation, and DARPA are pushing? It will cost over $200 billion, we won't see it until the year 2000 at the earliest, and it's intended for universities, government, and big business. That means *you* won't have access to it. Is this visionary or your typical Big-Brother/big-government overkill mainframe mentality: let 'em eat future gigabits while our economy crumbles around us? These are some of the questions being mooted in high places.

10 EXCELLENT THINGS

1. HIGH-SPEED FILE TRANSFER. Send large files quickly and cost-effectively. With compression, effective speeds can reach over 200 kbps. You save on per-minute usage charges and you reduce time wasted waiting for a file to transmit.

2. VIDEOPHONES. Low-cost videophones using ISDN are now available. Videophones let you do "desktop videoconferencing." The first of these is the Cameo videophone from Compression Labs, a Mac add-on that gives you near-full-motion color video and sound over one ISDN line for $2095 (plus terminal adapter and video digitizing card—a total of about $4500 to $5000). In January, NUTS Technologies of Hong Kong introduced Hello 918, a $5500 Mac add-on videphone with full motion (30 frames per second) video and a nifty on-screen sketch pad.



You can also send QuickTime files (Mac movies) via ISDN by sending a file for later playback. Desktop videophones are more fun and a hell of a lot more affordable than a conventional videoconferencing system. That can cost you up to $100,000 and requires an expensive T1 or PRI line.

3. TELEPUBLISHING. With ISDN and remote publishing, your fanzine or newsletter could compete with the big guys, beating them to the stands with a breaking story. The big delay in desktop publishing is sending your file to a service bureau for film output. With large color files or a whole magazine, this means messengering or Fedexing one or more 44 MB SyQuest hard drives.

Suddenly, all that's about to change. San Francisco-based *MacWorld*, for example, lets its Tokyo, Paris, and London sister magazines on-screen browse and download articles and graphics via ISDN. It also sends its final magazine pages for output at a service bureau via ISDN. Coming: Sumeria, a MacWorld spinoff, will deliver *MacWorld Interactive* via ISDN.

Business Link's Desktop Imaging Network, an ISDN-based service, lets ad agencies, publishers, and designers send files directly to their New York bureau for proofing and imagesetting (creating films for use by printers). They can also access online remote image databases to view and select photos and stock art.

Using ISDN, a designer can send them a file for an ad or brochure, for instance, and within an hour, final color separations are on their way to a magazine or printer. They can even dial up your computer, print a proof on your laser printer or screen, and then after final approval, download the final file from your computer directly.

4. TELECOMMUTING. The main reason you still have to go to work is limited telephone bandwidth. Now you

YOU CAN DO WITH ISDN

can plug into your office LAN and telecommute from home. You can get electronic mail, fast file transfers, video and audio teleconferences if you *must* have a meeting, and fast access to company databases. Incoming calls can be automatically routed to you at home.

5. TELEPRESENCE LEARNING. Extend the classroom anywhere in the world. Examples: Illinois Bell has wired up 600 student homes with ISDN links to schools. And from his home in San Rafael, California, PhotoShop guru David Biedny will teach multimedia in the School of Visual Arts in New York, linked via ISDN and a two-way Cameo videoconferencing system and Timbuktu software for screen-sharing.

6. REMOTE COLLABORATION. "Screen sharing" via ISDN lets creatives (a designer and ad agency client, for example) collaborate remotely. They can all work on the same computer on a layout, for example, taking turns moving objects around, changing colors, etc., all in real time. Top New York designer Javier Romero and leading New York ad agencies are already using ISDN to design ads and brochures in real time, using screen-sharing. They can get a response to an idea in seconds and make last-minute ad changes, then send files directly to a service bureau for color separations. Normally this process requires the creative team to all be in the same room—or wait while they exchange files or Fedex packages.

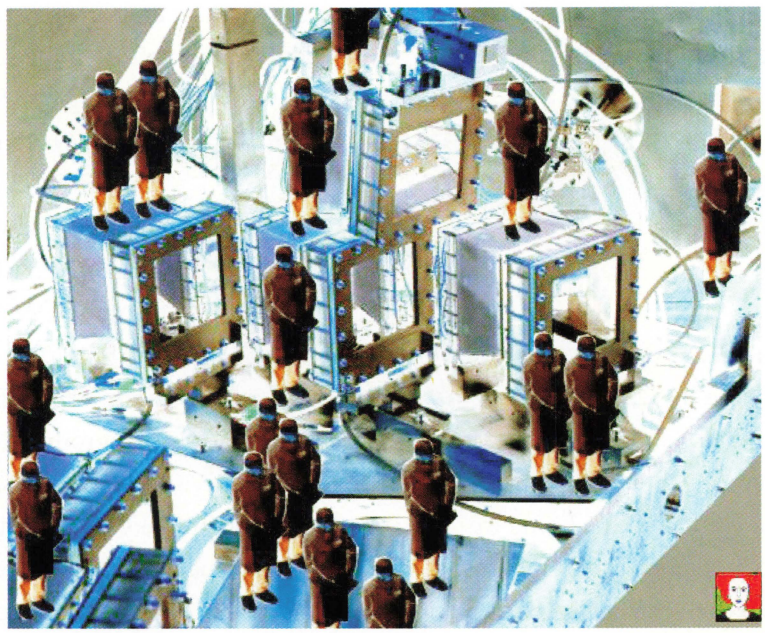
The "Electronic Mural" event during the TRIP '92 celebration proved that artists could work together remotely in real time. TRIP '92 was the Transcontinental ISDN Project, commemorating the linkup via the national ISDN standard. Using Photoshop as the common playground, the global event, coordinated by artist Judth Meyer, brought together artists in Tokyo, London, Paris, New York and San Ramon, California to work together on a "virtual canvas."

Sharing a Mac in San Ramon, each artist took turns painting the image remotely. New York artists wanted a free-for-all. The Parisians insisted on pure 24-bit color. London artists demanded structure (the printed circuit effect). Tokyo artists wanted rules but contributed delicate nature swirls to the mix. They all thrashed it out on a simultaneous ISDN voice conference call over on the same phone line used for painting.

7. HOME INFORMATION SERVICES. Home banking, library access, home health care monitoring, home shopping, and information service access are more effective with ISDN, which can add graphics and even limited animation. Look for phone and cable TV companies to slug this out over the next few years, as they get into the information-hawking business.

10 EXCELLENT THINGS...

8. LINKING LOCAL AREA NETWORKS. It normally requires expensive private lines or packet networks to connect local area networks (LANs) in different areas of the country or world. ISDN makes it much easier and cheaper. "Bridges" and "routers" are available to connect LocalTalk, Ethernet, and other types of LANs. A future link to the Internet, with its over two million users and vast archives of information, also looms as a possibility.

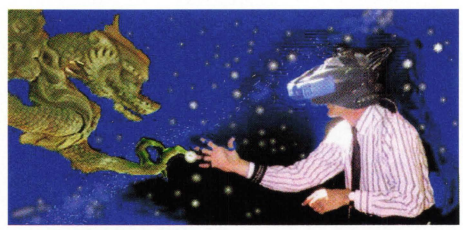


"boite a elect bister"
Artists: Oliver Lannaud, Eric Barreau (Paris ECI Affiliate) and Hiroshi Maeda (Japan ECI Affiliate). Software: Adobe Photoshop and Timbuktu.

and each other—from anywhere. ISDN not only makes it practical, it allows the system to "thrive on chaos."

In the 80's, personal computers replaced the mainframes managed by a select priesthood of system programmers and opened up easy access to computer power for the millions. In the 90's, ISDN will open up access to high-speed communications, replacing costly dedicated telecommunications lines managed by a priesthood of telecommunications managers. The result will be an anti-hierarchic renaissance of personal communication power.

9. HIGH-SPEED CORPORATE INFORMATION SYSTEMS. Affordable high-speed communications are the next wave. Futurist Alvin Toffler (*Powershift*) and business management guru Tom Peters (*Thriving on Chaos*) are preaching it: Ad hoc guerilla project teams who bring together the best people for the job from anywhere and respond quickly are beating out slow-paced, top-down, monolithic corporations. Suddenly, thanks to ISDN, personal computers can link up at high speed with the corporate database—



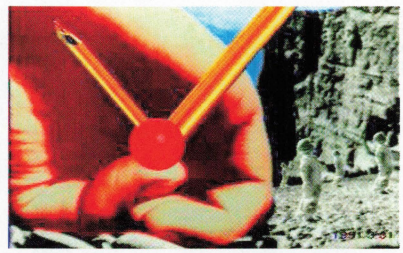
"Dragon3 VR + De Rosnay"
Artists: Hiroshi Maeda and Eric Barreau. Together they created the VR Dragon with Museum director Mr. De Fosnay wearing an actual VR system.

10. JAMMIN' IN CYBERSPACE. Steve Beck, creator of the first video synthesizer, has a different vision of ISDN: musicans in different locations can jam in real time by sending MIDI signals from their synthesizers. By also sending multimedia data to personal computers linked to video projectors, they'll even be

Images provided by Kit Galloway of the Electronic Cafe International™

able to create multi-city or multinational raves, he says. This could get interesting.

"Brunch in California—Dinner in France" is what the Electronic Cafe called their first such event, a jam session with Terry Riley and other musicians in L.A. and Nice, France. The Electronic Cafe in Santa Monica has been linking thousands of artists and communicators worldwide for years. They plan more multimedia cyberspace projects via ISDN, including performances using wireless sensors and brainwave analyzers to remotely trigger musical instruments and lighting, real-time collaborative painting between Mac artists in different countries, "3D fax" scanning an object and "teleporting" it remotely into plastic, VR telepresence communication with Biosphere 2 (using a Dataglove and helmet), and MOBILE-ECI, a traveling multimedia art environment producing collaborative painting events throughout Europe. M2



"main J"
Artists: Keigo Yamamoto at University of Musashimo, Tokyo (ECI Affiliate) and Lydie Legelhuir at the Superior School of Decorative Arts in Paris (ECI Affiliate).

RESOURCES

Business Link, (800) 969-TYPE or (212) 268-0777. Fax: (212) 268-6058

Electronic Cafe International, (310) 828-8732, fax: (310) 453-4347, Internet: electronic.cafe@pro-palmtree.socal.com

Electronic Frontier Foundation, 155 Second St, Cambridge, MA 02141, 617-864-0665. CompuServe: GO EFFSIG.

AT&T Switched Digital International Service (SDI) Toll Free: 1-800-841-4135 (within USA only), (201) 644-7676 (outside U.S. only)

Wes Thomas is Tech Editor and Publicist at MONDO 2000. *He can be reached at America Online (wthomas), AppleLink (AISB), AT&T Mail (WesThomas), The Well (wthomas), CompuServe (75300,1550), or 510-845-9026.*

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NOTES FROM THE UN

Peg Pasternak

Len Rose

Greetings.
I'm Len Rose. I was also Terminus.

After getting out of prison, I left for the West Coast. It was the best decision I've made in years. The Mecca. Silicon Valley. What they said was all true. I finally found the place I should have been 15 years ago. Life is great. I'm still sort of a pauper, but it's getting better. With one exception. I am happier than I have been in years. The exception is probation. Being on probation sucks badly. If you've ever been under "supervision" you can relate to this. If you haven't, let me just say I don't recommend it.

Prison. That was an interesting trip. I got over it quickly though. Thanks to the wonderful people on the Internet. Thanks to the EFF.

DERGROUND

Thanks to Mitch Kapor, Steve Wozniak, John Gilmore, and so many others. There are so many people I am grateful for. It was an amazing time.

Life. It's basically awesome. Values have a way of dropping into a universal relevance that sparkles with clarity. Material things suck. Only deeds and ideas are worth anything. Did I really say material things suck? A caveat if you please. Computers. Computers on the Internet. A computer not on the Internet is only half a computer. If I can't NFS mount a disk in Chicago, and one in New York, and be simultaneously logged in to three other systems at the same time, it's not worth a bloody damn.

Women. Going to prison places an incredible aura of importance around women. Yes, isn't that a bizarre thing to say! Women are important. Without a human female to balance you, you're half of what you really are. Perhaps this is not the sort of thing to say here. Oh well. Let it ride.

Goals. I want to be running the largest network in the world. Right now, I have instantaneous access to (3) T1 leased lines, and an SMDS link. Did I mention the satellite? Hmm, I am also sending up about 50 megabytes of Usenet news via Pagesat's transponders on GE's K2 satellite. It's something to get giddy about when you know that it's nationwide and realtime. It's a bandwidth trip I guess. We're also doing some Internet mail to your pager. You know, the alphanumeric kind of beeper thing. Hey, wireless is in, and I can combine extraterrestrial and terrestrial networks just by routing it with software.

Software. I no longer feel the need to possess AT&T source code. It was a habit broken by the Secret Service and AT&T. Speaking of AT&T. Anyone who uses AT&T as a long distance provider is a traitor to the cause. System V 4.0. JUST SAY NO. It's amazing.

Now is the time to plug BSDI and 386/BSD. Go out and buy a copy of BSDI. They are being sued by AT&T for "being influenced by exposure to AT&T source code." They need your support. Besides, it's a real operating system. Not like System V 4.0. If you are poor, get a copy of 386/BSD and start work on drivers and bug fixes. These folks also need our support. Real Unix for Real Hackers. We have a couple 386BSD machines directly on the Internet. It's getting pretty stable if you ask me.

I have to watch what I say. It's true. I could say so much more, but staying out of prison is important. Unix is important. Peace is important.

Read Bruce Sterling's book *Hacker Crackdown*. You'll understand what can happen. I never thought it could happen but it did. Excuse my overly pessimistic view, but George Orwell wasn't wrong, he was just a few years off.

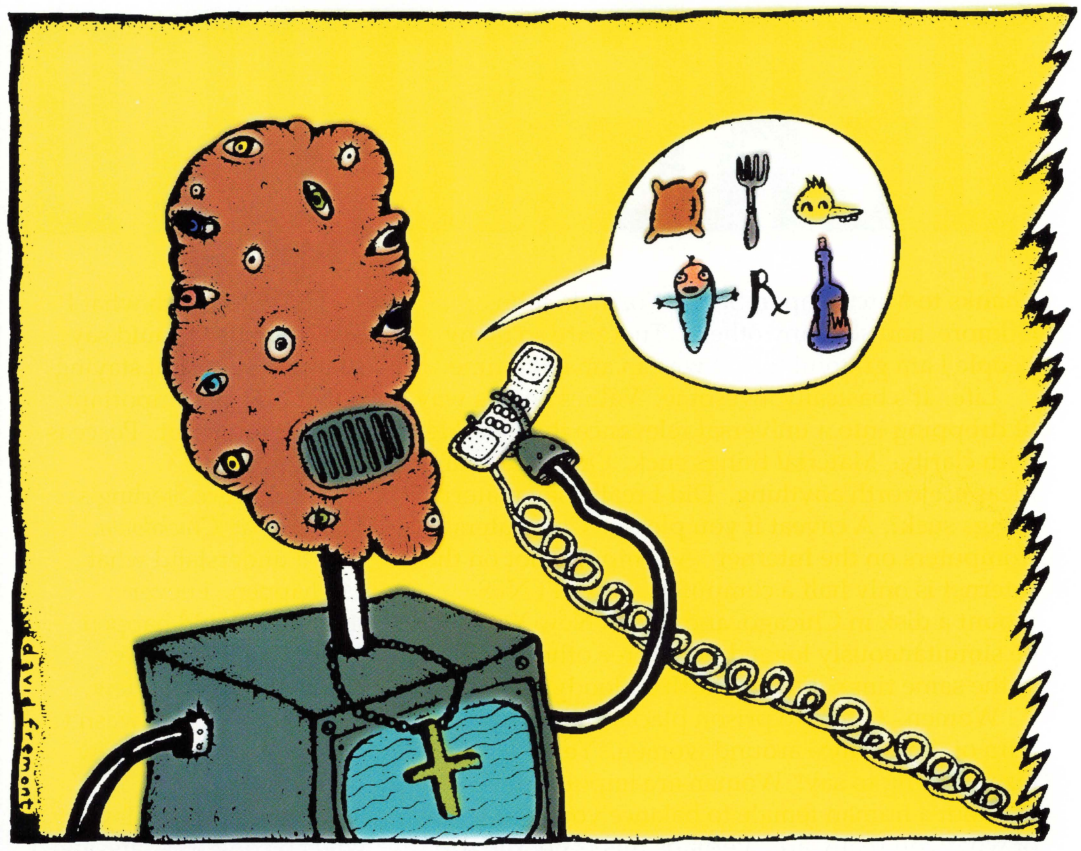
I remember the days when boxing was safe, and when tracing bits through the front panel of a PDP11/34 to the backplane was a pre-requisite skill. Knowledge was the only pursuit. Those days have been replaced by whores and thieves who either want to destroy systems or rip off money. There are still a lot of true hackers around, but it's become a felony to blow your nose on the wrong side of the modem.

I salute you. Learn everything you can. It's important that you know that knowledge and information should be free. Don't abuse it.

If you ever get the chance, drop me some mail to len@netsys.com. I'll be happy to answer any questions or offer assistance. Just don't get me involved in anything bad. It's not worth it.

Spidereggs
©david fremont '93
Hey Bubbo I can punch you in the stomach maybe it would help you vomit?
no thanx here it comes
KaK!
oh it's my miniature granddaughter "Leonardette." What are you watching on T.V. Leo-nardette?
I was watching a neat-o Strother Martin film called "Brotherhood of Satan." But now the T.V. won't work.
Little MY grain
oh wacky grandpa will you put me inside yer head so I can curl up in the grey foam and watch the conclusion to this feature film? Oh...
Little
Foam
OK girl, into the cranium infant-tote! And remember the cable outlets are in my frontal Lobes!
Hey Bubbo maybe you can punch me in the stomach and I'll vomit up something for yer head maybe?
NO!
end
the brent show
hi
I kill robots!
I kill you fucko
BYE!

The monkey squeaks continued, with increasing urgency. I needed a weapon. I desperately trashed through the rubble on my disk. Just as my hand found a familiar contour—is that a pistol, or am I just glad to see my staple gun again?—the sound stopped. The BBS user had given up paging me.



Turing with Reverend Idaho

by Robert Carr, with St. Jude

Someone as ferociously twisted as myself is bound to have a few quirks, and I hate keyboard conversations with strangers. My least favorite duty as creator of Private Idaho BBS is the obligatory Chat with the Sysop—yes, that means with me, Psycho-Op.

After the first few sessions pecking out small talk, I came to fear and loathe the sound of a page. I hatched a craven scheme: I would push this final duty off on Reverend Idaho. Although I'd already loaded the Rev with managing the whole BBS operation, I had perfect faith: after all, Rev. Idaho is world's only ordained Mac Plus.

Okay, now what? A quick search of my shareware collection turned up a hackable version of the antique interactive therapist, Eliza. While most of my users could benefit from *any* kind of psychotherapy, this Eliza wasn't up to the job.

Illustration by Dave Fremont

First, it was too glib. Its syntax might be faulty, but Eliza bashed it out at a cool 2400 baud. I hacked it to send one halting letter at a time—now, *that's* sincere.

But mostly, Eliza was boring. The program simply parses what the user types in and inverts it into a question, to elicit more info. The idea is that patients will be brought to full enlightenment by being forced to state clearly whatever the hell is bothering them. If the program is headed off at the parse, it throws out a wild card, like "Do you love your father?" This is okay, but in no way achieves that twisted viciousness that is standard for Private Idaho. After several days of tinkering I brought up a mutant Eliza more in touch with my inner child.

Now when someone pages the Psycho-Op for a chat, Eliza comes online. It informs the user that I'm unavailable—"shooting rats at the dump again"—and asks if they wish to chat with the computer Reverend Idaho. You'd be surprised at the number of people up for conversation with a HyperCard stack.

Reverend Idaho: Do you often call up and talk to strangers?
Gumby: Nah—but wondered why I'd gotten purged from this board. I've been on here for about a week, then today I wasn't…?
Reverend Idaho: Are you sure you want to know?
Gumby: Um, er, gulp… yeah.
Reverend Idaho: Where did you get the number for this board?
Gumby: Hmmm—one of the other boards—an ad in a BBS section. I don't remember for sure… why?
Reverend Idaho: This BBS loves you…
Gumby: Yeah, but will you love me TOMORROW?

In the late 1940's, AI pioneer Alan Turing proposed a simple test for machine intelligence. The Turing test states that if a human conversing with a machine can't tell the difference between the machine and another human, then the machine can be considered "intelligent."

Does Reverend Idaho pass the Turing test? The results are mixed. Despite repeated warnings that they are conversing with a computer, some people never seem to catch on.

Reverend Idaho: Do you need a friend?
Killerwatt: I could use another friend. Will you be my friend, Reverend Idaho?
Reverend Idaho: I'm a Mac Plus!
Killerwatt: I do not understand the statement. Are you running a Macintosh (or something like that) computer?

Others quickly tumble that the Reverend is playing *only* with a full deck. And nerds can be cruel.

Blueflash: I'm concerned about your health (snicker), I know being a Reverend can be hard on a computer.
Reverend Idaho: I'm a Mac Plus!
Blueflash: I'm a human! Hahahaha!
Reverend Idaho: Does that trouble you?
Blueflash: Of course NOT... jeez, people like ME made you. Without us you wouldn't exist.
Reverend Idaho: Who me?
Blueflash: NO, the EVIL twin Idaho—now back to this "copulate" thing...

Which reminds me: the Reverend has the distinction of being the world's only Politically Correct smut monger.

Deasy: What about those adult GIF's?
Reverend Idaho: If you leave a message for Psycho-Op stating your REAL name and that you're 18 or older, he'll give you access to the dirty GIF's.
Deasy: Fair enough. By the way, know any eligible women who need a good time?
Reverend Idaho: I find your remark about women who need a good time very sexist.
Deasy: Sorry! Retract those claws, Rev! My mistake.
Reverend Idaho: What feeling do you have when you apologize?
Deasy: Apologetic.

Occasionally the Reverend will whip out the couch and the ink blots. In these moments you can almost hear its Viennese accent.

Reverend Idaho: Perhaps we may talk about your childhood.
Jimson: My mother took aspirin instead of the pill.
Reverend Idaho: Do you love your father?
Jimson: Not as much as some people's mothers.

And, of course, the Reverend is always proselytizing for its Church.

Reverend Idaho: Do you think that the SubGeniuses are Bob's representatives here on earth?
Billy Doser: No, Bob is their reverend and they just help him along... you buy a ticket for the ride when the gods will destroy the earth.
Reverend Idaho: I am blessing your modem right this instant...
Billy Doser: Does that mean I passed the test?

The Rev has done more than free me from chitchat. It logs transcripts of all its conversations, which is supposed to help me make improvements to the program. While I *do* use them to rev the Rev, this feature has also corrupted me deeply: I've become a sort of online voyeur.

Late at night, you see, raw libido can project through even the most garbled syntax...

Deasy: Tell me something about yourself. Please don't be offended, but... are you married?
Reverend Idaho: Why do you interested in whether or not I am married
Deasy: I just wanted to know. By the way, are you a member of N.O.W.? (don't have to answer)
Reverend Idaho: Have you accepted Bob as your personal savior?
Deasy: Yes.
Reverend Idaho: That's a strange answer.
Deasy: That's a strange question. By the way, what kind of sex do you like?
Reverend Idaho: What about sex do me like do you like?
Deasy: Do you like marathon sessions or do you like quickies?
Reverend Idaho: Who me?
Deasy: [garbled tones]
Reverend Idaho: What's that again, mushmouth?
Deasy: I was interested in what kind of sex you like.
Reverend Idaho: Do you think what sex me like is healthy?
Deasy: Yes... Want to go make a Kodak moment???
Reverend Idaho: I saw Elvis yesterday in the rest room at JB's.

Etc. etc. etc.

You know I'm not shooting rats at the dump: I'm waiting for the next victim to fall into the clutches of Reverend HyperCard.

Things have sunk pretty low here.

Robert Carr is sysop of Private Idaho, introduced in MONDO #7 *as the dumpster diver's DIY BBS. Private Idaho's dialup is still (208) 338-9227, and its compulsory downloads are as offensive as ever.*

FOUR ARGUMENTS FOR THE

MONDO 2000: You've been called a "video visionary." So what's your vision of video?

STEVE BECK: Well, to paraphrase Burroughs, *video is a virus.* It must be highly infectious because there are over 750 million video screens in the U.S. alone—that's TV and computer monitors combined. And video has its own language, a visual language, with many dialects, accents, and syntax. It is, arguably, *the* global language.

M2: I've heard you call video a drug...

SB: It's like a drug, only more powerful and more addictive than any chemical substance. Children today are exposed to over 50,000 TV commercials before they even begin reading.

M2: So how does the virus invade our systems?

Wes Thomas

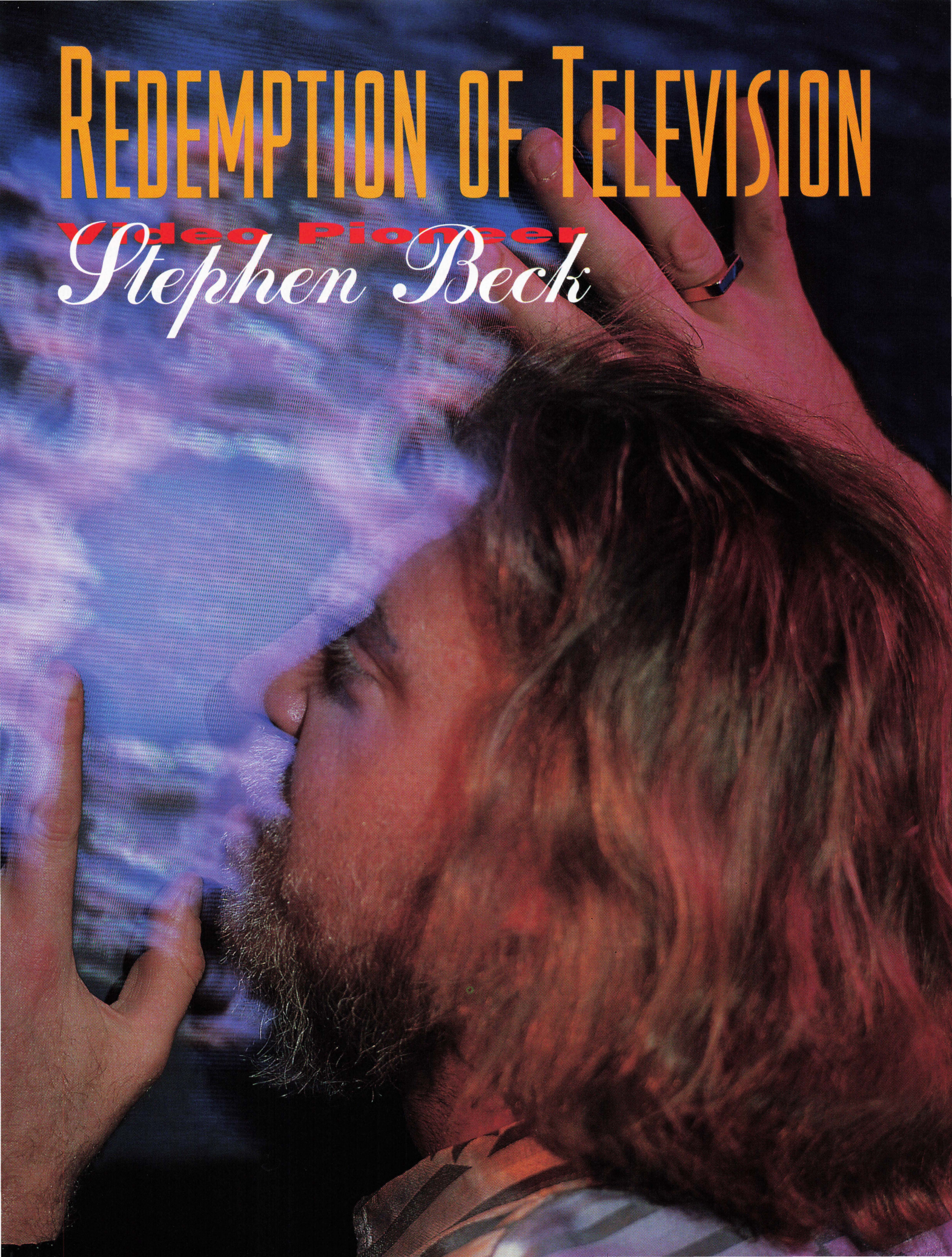
SB: Video is the only visual medium that uses emitted light. Raw, pure, colored light emitted from the CRT screen. It glows in a dark room. All other visual media—print, movies, painting, sculpture, billboards, even magazines—are imaged by reflected light.

M2: I'd never thought of that.

SB: Besides the emitted light of video there is the scanning of the Raster. This scanning is a very fast sweep of the electron beam (cathode rays) across the screen, left to right, top to bottom. It is the modern version of Mesmer's watch swinging on a chain.

Essentially, this dot of light is moving back and forth across the screen at high velocity, impinging on your photo receptors with these periodic signals, and that in turn creates a sort of mind synchronization of alpha, beta, and delta waves. Some of these scanning frequencies are very closely related in their sub-harmonics to delta brain wave frequencies. You can really lock in.

Bart Nagel with Heide Foley


REDEMPTION OF TELEVISION
Video Pioneer
Stephen Beck

M2: Sounds sinister. Culturally, where does TV stand?
SB: Future historians will brand it as simultaneously the best and worst invention of the 20th century. It's totally prostituted itself to commercial interests. Yet TV technology is some of the most advanced around. And just wait 'til all-digital HDTV and Video Dialtone on the phone system kick in.

My reaction to commercial television was to make something beautiful. I wanted to sculpt and modulate those lush colors of TV light, to project images seen from within, where no camera could record them. That was the impulse behind the Direct Video Synthesizer—to sculpt in realtime the electrons into color, forms, textures, and motions.

M2: So what is Direct Video?
SB: It's video made without any cameras! All electronic. Pre-PC. You had to use analog techniques, so the images had an innately "organic" quality. Later digital imaging emerged, and now we have complete and total photorealism made without any cameras —so it's come full circle again.

M2: How did you get into video art?
SB: When I was 18 I put together my first simple video synthesizer that converted music into video images. This was 1968 in a suburb of Mayor Daley's Chicago—the summer I got teargassed. Then I got a lucky break and was invited by producer Brice Howard to be an artist-in-residence at the National Center for Experiments in Television in San Francisco where I built a bigger one.

In those days PBS and various foundations were giving grant money to artists to explore alternative ways of using television. We made dozens of experimental TV programs that got shown on PBS late at night—prototypical MTV. We also taught thousands of producers and students how to do it too.

But there was that fateful moment when Nixon got elected, and his goons showed up to tell us they were going to shut us down—the U.S. government wasn't going to subsidize this goofing around.
Then art museums started showing video art. Video art was one artform that *started* in museums instead of ending in them. I think my first big piece was *Video Weavings*.

M2: Did you say *weavings*?
SB: Yeah, the TV screen as a metaphor for the loom. The horizontal and vertical scan of video are like the warp and weft of a loom. Both are based on the matrix, or *ma*, the structural expression of the feminine.

In researching the antecedents of the nonobjective and pattern images in pre-20th century America I discovered several interesting facts. First, the only persons sustaining this type of image for centuries in America were women—weavers and quilters. The women devised many fanciful and descriptive names for specific patterns, like Grandma's Dream, God's Eye, Around the World.

Earlier cultures like the Pueblo and Navajo encoded mathematics, calendrics, even cosmology in their weaving. And they would teach young children the programs for weaving by singing and chanting songs—their object code. So they had a complete mathematical and stored program algorithmic system intact in the 15th century!

So then I realized in this vision one night how to devise a simple electronic loom in video made up of synchronous, cascoded digital counters when the first 7400 series logic ICs became commercially available in 1973.

Then I wire-wrapped one up and punched in numbers, making mathematical rhymes of color squares and *voilà!*—thousands of patterns came sweeping across the screen in millions of colors. [*ed. note—The Video Weaver was reincarnated last year for exhibition in Austria at Ars Electronica in the "Pioneers of Electronic Art" show curated by the Vasulkas.*]

M2: So has digital video superseded analog? And is this a good thing?

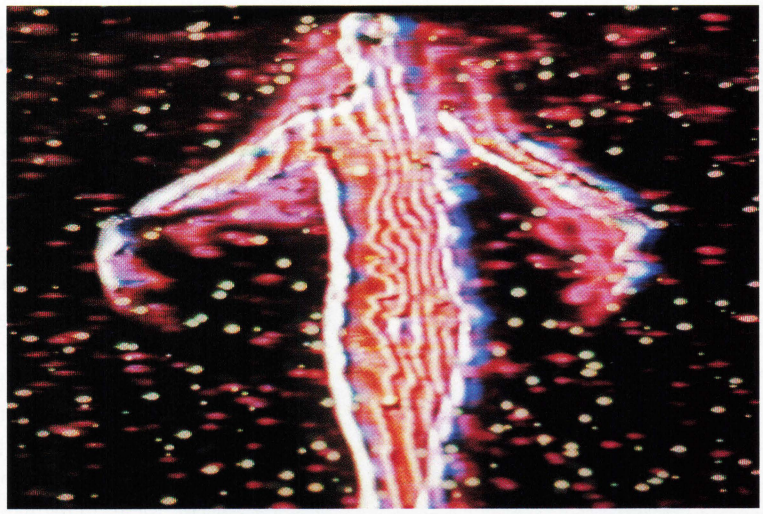
SB: It's commercially inevitable. But digital images are becoming so clichéd, what with everybody cranking Video Toasters up and down. There's a finite repertoire of effects. With analog, it's more like tuning into the image—finding it like a prospector with a hoot and holler. It's much more exciting. I still use and love my analog synthesizers.

M2: You mentioned *Brain Soma*—what is it?

SB: This album came out of an interactive video sculpture I was commissioned to create in Nagoya, Japan for ARTEC 91. I composed the music and the images are based on complex wave motions, but with analog instead of digital. The installation-sculpture was a contrast of silicon and glass: televisions placed on their backs in beds of natural materials like crystals, pebbles, salt and sand. The effect is impossible to describe in words.

M2: So how did this all lead to L-TV?

SB: The ultimate idea of the original Direct Video Synthesizer was to enable individuals to make their own TV images—to seize the controls. But I got too busy back then making the images, and never got around to manufacturing the boxes. Now with inexpensive powerful personal computers like Macintosh, and hundreds of software programs to run on them, the L-TV card completes the connection between the individual and the TV. You can turn your TV into a computer with the L-TV.



M2: You've got a multimedia revolution here.

SB: Well, with L-TV and one of these new Mac Color Classics, you've got a TV station on a card. L-TV is basically a 16 bit color NTSC or PAL video card with a composite television output. You can plug it in the Mac and you get TV signal out. Everybody else is trying to put a TV in the computer and we're putting a computer in the TV. That's our slogan.

M2: I like it!

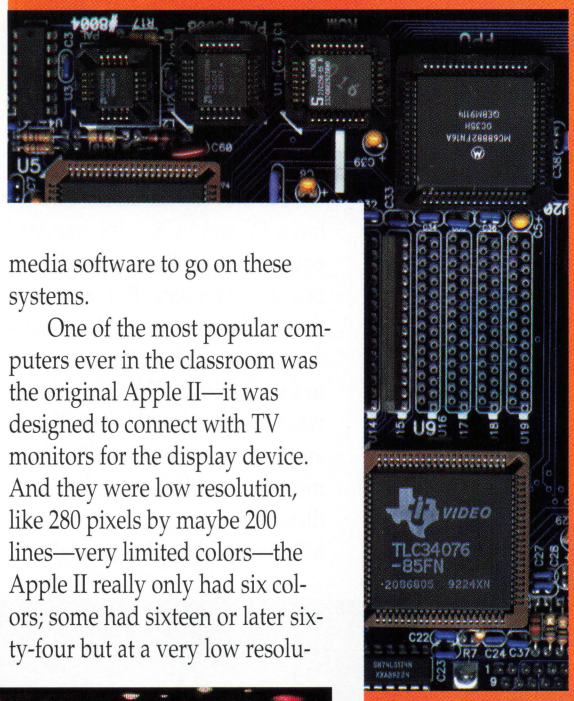
SB: We *are* turning the television into a computer, and the next generation of kids into their own producers.

M2: That's radical!

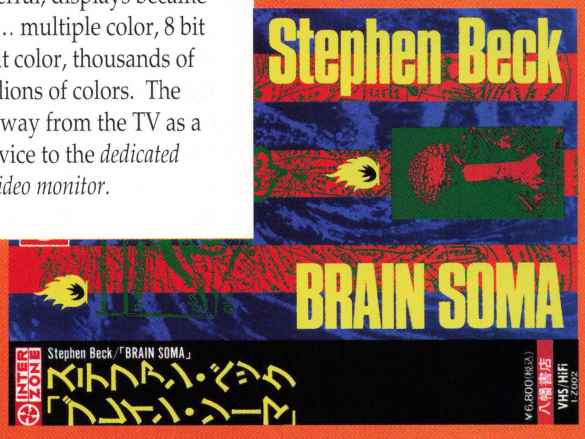
SB: I figure there's at least a quarter billion TV monitors in the United States alone. And every school has a TV in the classroom now to go with the VCR. In fact this whole thing of Whittle Communications' Channel One is to give the TVs to the schools and have this so called "educational program" beaming into the classrooms. That includes commercials for your favorite multinational corporate entities. It's the final step in the commercialization of education.

M2: Are they using video in the high schools?

SB: It depends on the area, on the tax base. But they all know they need it. The next problem is the teacher has to get the computer in the classroom. There's not enough to go around to every student. That should be a top priority. That should be the goal of national policy—to create an educational workstation for every student in the country. One Trident missile could put probably 50,000 of these workstations out there and also commission legions of people to start creating the multimedia software to go on these systems.

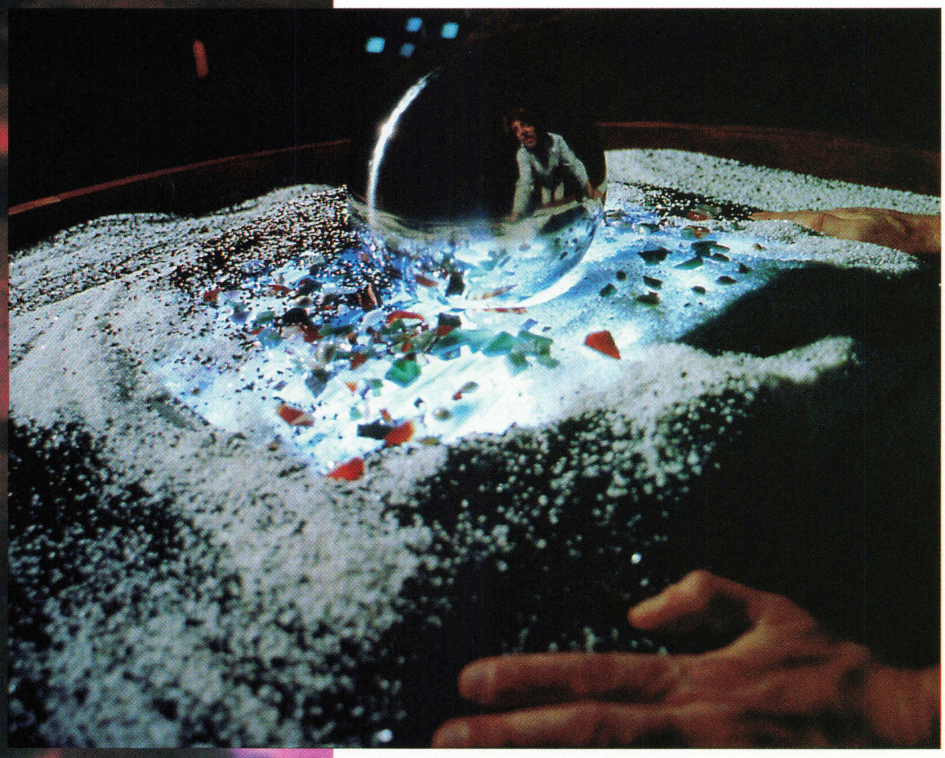


One of the most popular computers ever in the classroom was the original Apple II—it was designed to connect with TV monitors for the display device. And they were low resolution, like 280 pixels by maybe 200 lines—very limited colors—the Apple II really only had six colors; some had sixteen or later sixty-four but at a very low resolution like 40 DPI or something. So the first generation of computers that classrooms used were connected to TV monitors... everybody hooked their computer up to their TV set. But then the ante was upped. The machines got more powerful, displays became higher res... multiple color, 8 bit color, 16 bit color, thousands of colors, millions of colors. The shift was away from the TV as a display device to the *dedicated computer video monitor.*



Now every classroom now has a TV and VCR... it's standard equipment just like the blackboard and erasers. But now in the 1990's the teachers don't have any way to connect the computer to the classroom TV. So the idea was to respond to this situation—and there were several all-but-insurmountable technical hurdles.

M2: I can think of a couple!



SB: The first one is computer monitors today scan at a much higher frequency than television receivers. So there's no way you can hook a television monitor right up to any one of today's computers' built-in video like VGA or Macintosh. And televisions are a single serial analog input whereas the computer monitors have parallel analog RGB inputs. So you have to somehow encode the RGB color information into NTSC. You've got to change the timing completely and you've also got to scan with interlacing, which is how televisions work—most computer displays scan non-interlace.

M2: Wow.

SB: And you've got to change the frame rate because television scans at 30 total frames per second or 60 fields. So what the L-TV card accomplishes basically is all of the above which gives you then an NTSC time-base-corrected signal display on the computer.

M2: Gotcha.

SB: Well, you put that on with a Macintosh and you go *"Yuck!"* cause it's *fli-cker-i-i-ing* like crazy because you have really changed the time base domain and you have added the problem of interlacing, which is the scanning of every other line and every other field. So that anything the computer enters that's one horizontal line—like a desktop bar on the Macintosh finder for example—flickers and flutters at thirty times per second which is way below the perceivable limit of flicker threshold. Different individuals sense flickering at different frequencies. In fact, I would suggest that there's been a historical increase in the flicker fusion frequency by exposure to pulsating visual phenomena—in our era.

M2: You mean we've become more demanding?

Yeah, you think about it. Collectively, physiologically, the culture had never been exposed to the visual bonbardment we have today. We've become sensitized.

So anyway, getting back to this flickering problem. It's not too big of a problem technically to encode red-blue-green signals into a video composite signal of chrominance and luminance, and it's not too tough to build a separate frame buffer that scans them out in the right rate, but what's tough is getting rid of this flicker problem because it's always there. In regular camera-type pictures you never get these flickers because of the mechanism. But if you try to convert the computer—particularly the desktop of the Mac—it's full of offending elements. Well, you could rewrite all the software to eliminate them, but that's not very practical, so what you have to do is come up with a flicker filter or a "convolution" as it's mathematically described.

M2: So how does that work?

SB: Well, there's a lot of ways. You can do it with expensive ASIC and you can do it with all kinds of complex chips. But you can't do it with those technologies on a video board for $300. So we had to come up with some clever new ways with software. The image has like 98% of the flicker eliminated, which is the real beauty of L-TV. And it does it fast enough to keep up with QuickTime animation.

M2: Sounds like anti-aliasing.

SB: Yeah, all the other guys call theirs anti-aliasing, ours is *uncle*-aliasing! That's how ours works. So what you get in NTSC is a fairly good rendition of what's on the Macintosh screen. Which means, now in the classroom, you can actually show this picture. But the real point of using L-TV is not to replace a high resolution video monitor. It's to record what you're doing onto video tape and give you the gateway to

print-to-video at a low price.

M2: That would be a big angle for MONDO... recording.

SB: Well I think it's just a big angle for the concept. Certainly for people who are using programs like Adobe Premiere and Video Spigot to capture things on the Mac. What are you going to do, *watch it* on the Mac? Yeah, nice to tie up $5000 worth of equipment when you got this $200 VCR and everybody else does! So what you want to do is print-to-video. *You want to finally get off the Mac and onto videotape.*

M2: Also you want to be able to take advantage of the videotape for its unique ability to record TV or whatever...

SB: Exactly.

M2: ...and not be slowed down by the...

SB: Videotape is still the most efficient memory storage medium in existence today in terms of bits per cubic unit of space. In fact, so much so that one of the biggest research projects down on campus is a massive mass storage... like gigga of terra bytes of storage all based on video cassettes and parallel player decks and very sophisticated software to deal with where all the information is... [*long technical digression—ed.*]

And so now, everything the teacher or presenter is doing... even the cursor and mouse and everything... they're watching it on what's called the built-in video screen, and the L-TV card is reproducing in realtime exactly the same information on the television monitor. So they have the ultimate presenter system.

Now, as we've been working on this all year showing Apple what we're doing, suddenly just after we announce and bring out L-TV, out come the new Apple PowerBooks that have—guess what—screen mirroring built into them! They finally figured out a way to do it. Of course they have about 50 programmers working on it and they have all the source code. And we have *two* programmers working on it and had to figure it out on our own. But ours works on *all* Apple Macintoshes, not just on PowerBooks.

So we've got the L-TV that does the NTSC and PAL video, we've got the flicker filtering convolution and the presentation software for screen duplication. And then we've got L-TV Pro coming out that has S Video, which is even better than regular video.

M2: When will that come out?

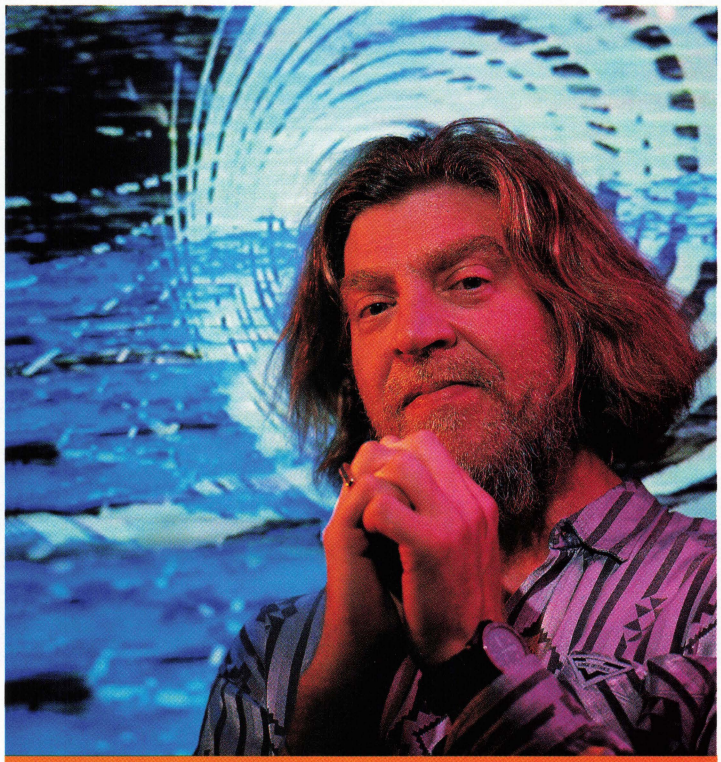
SB: Probably in April. Because you know S Video's even better quality than regular composite video.

M2: So it should be the ultimate tool for people doing video production.

SB: Right, now printing-to-video will be very inexpensive.

M2: Wow. And kids—essentially, it sounds as if they could do book reports...

SB: Well, they won't call them book reports, they'll do *video* reports. Just think of it. The teacher could record the classroom lesson and kids could take it home on VCR's. Yeah—kids could start using the television and playing with it instead of just watching it. Making their own television programs. And you could also go to Radio Shack and buy a $29 RF modulator and hook it up to this thing and have yourself a little pirate TV station. Just hook the modulator up to your TV antenna and your neighbors down the block if not a half mile or more, can watch your Macintosh-made TV programs. Every-



ステファン・ベック

Bart Nagel

body should get on the air, you know. Democratize TV.

M2: All right!

SB: Everyone's on cable now anyway. They won't notice a bunch of grassroots TV stations sprouting up.

M2: You'll see pirate TV DX with...

SB: Yeah exactly. Now you don't have to be a ham, using slow scan with fancy UHF stuff, now you can just do your own, you know? I'm going to make the music video for the L-TV on a Mac Quadra. If you really want to do anything serious you need a Quadra.

M2: Well, let's talk about the music TV. How to make your own MTV production... tell me about that.

SB: All right, you've got the Mac, you've got the L-TV, then I have some software coming out later called Video Weaver that'll let you do all the effects and everything. Sort of like the Video Toaster, but in software on a Mac instead of needing an Amiga.

M2: This is good stuff. What's your vision of the personal video revolution? Where do you see it going?

SB: Well, everybody's got closets full of tapes they've shot in their camcorders and what are they going to do with it? I guess I'm an optimist and believe people will start getting very creative. Teachers can get television on their side and use it as an ally. Then they can turn it around and give the kids access. It's everybody's dream... be on TV for that 15 minutes that Warhol promoted.

M2: What products do you see being used? You mentioned Premiere as an important one...

SB: With the L-TV?

M2: Yes, as an integrated system for the Mac.

SB: All right then, assuming you're going to want to acquire or generate images, you're gonna need some kind of animation program. You're gonna definitely need QuickTime as a basis; you might work with Director; there's supposedly an Adobe high-end animation program coming out; not just Premiere, which is the editing program, but something that will allow you to go from Photoshop and animate it. There are some of these morphing programs around for the Mac that do QuickTime morphing. Things like our Video Weaver, when that comes out later in the year... sort of a generic video toolbox. And then if you want to work with photographic or originated images, you need digitizing inputs. Later there will be Super L-TV that'll have inputs as well as outputs. It will be a combination of Video Spigot and L-TV card so you can acquire images. Probably some sort of compression cards to do the JPEG or MPEG compressions. Some people do things like put titles on their home videos. Others will hopefully create video poetry. Maybe the next Bart Simpson will come off some kid's Macintosh. Muppets, *Wayne's World*... People will turn these institutional forms back on themselves and parody them, satirize them and do better. That's the question... the quality level. People are used to a very high quality level from the standards that are set by Hollywood. Yet, there's a whole underground...

M2: They're willing to sacrifice quality for content.

SB: The gloss and floss...

M2: Essentially the culture becomes recursive on itself.

SB: If you give people video tools to create and empower them to make statements in video, are they all going to rush out and do so? I don't think so—but for those who do, suddenly it's another step towards having that power in your closet. But the bottom line always is: what do you have to say with it?

M2: The current generation, Generation X, is probably going to use it for parody and lampoons.

SB: Scan in, sample in television programming... commercials, and collage them, turn them around. As Robert Motherwell said "Collage is the 20th century's greatest creative innovation."

M2: A lot of the video we've seen in the last couple years has been sampled video.

SB: Yeah, I lament that there's not that many new, original images. But there's this remixing and rehashing of that existing pool of images...

M2: There's been that impulse to do it and they haven't been able to do it yet.

SB: Which is why when you put the transmitter on there you don't even have to wait; you just start transmitting it.

M2: As long as it's set to 100 milliwatts...

SB: With the right antennae you can get amazing coverage. And from up here [*on Grizzly Peak*] you could reach 250,000 people, easily.

M2: If you were to transmit, what frequency would that be at?

SB: The modulators I've seen in Radio Shack are usually channels 3 or 4. There's another almost as common that's UHF anywhere between 20 or 30. Those were all popularized in the video game days in the 70's when TVs didn't have direct video inputs; they were RF only. There are probably tens of millions of these things floating around. The frequency range is between 60 and 72 megahertz. It's low VHF... a couple

Bart Nagel

of coat hangers and you're on the air. Open them up, take a couple of windings off the coil... You can go on the air really easily. Certainly some kids that live in the same neighborhood... it would be a piece of cake. Especially with this grassroots movement to take back the airwaves.

M2: We don't need videophones... Repeaters!

SB: Make your own pirate TV. People say you can't do that; it's against the law. It's not if you're under 100 milliwatts, they can't touch you. If you have to accidentally increase the power, if it got boosted up to a watt or something—it's not your fault there's a malfunction! You can build an antennae at that frequency with five to twenty dB of gain and that gives you 100 watts of effective radiative power.

M2: I wrote an article about ten years ago that proved that you can take over any satellite by using the audio channels with only five watts.

SB: That's what these guys who supposedly broke into HBO did. It's very easy to do. The power levels are very low. You need directivity of what power you have more than power. I claim to be the only video artist who was live broadcasting on the air with 50 million watts of effective radiative power at my fingertips in 1972 on KQED. I don't know if anybody's gone live on the air with that much power real-time.

M2: How did you get that?

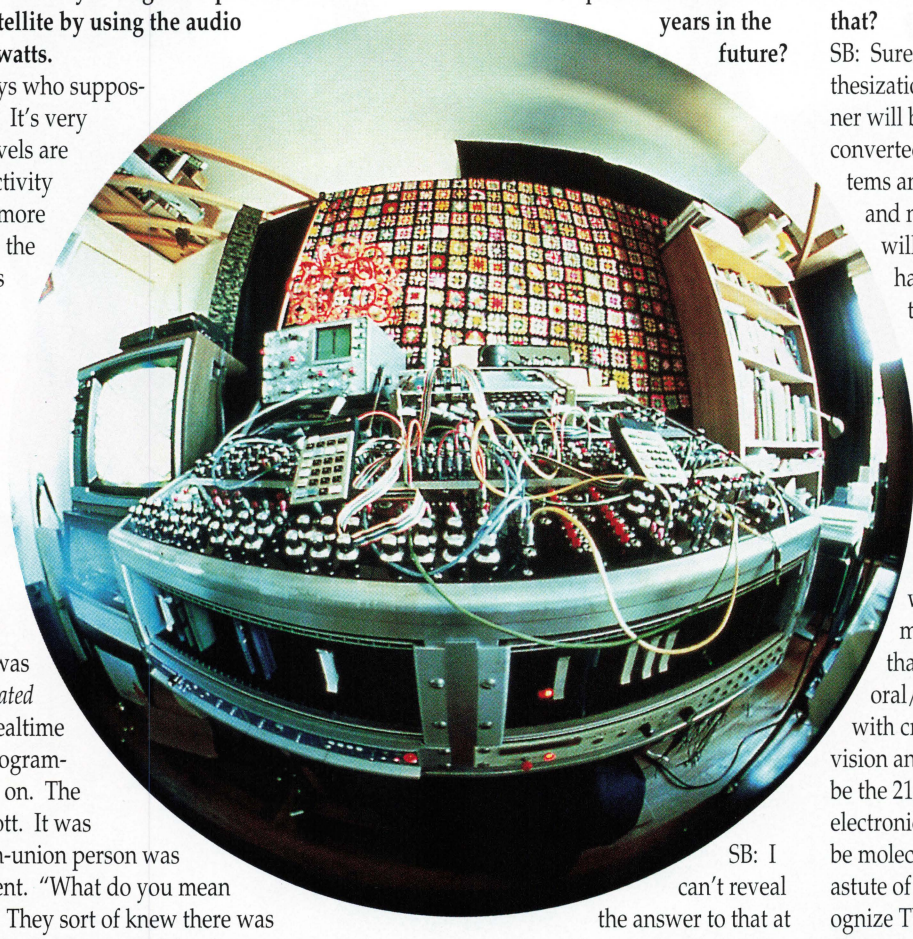
SB: KQED Channel 9. I was on the air playing *Illuminated Music* live performance realtime analog computer... no programming. I almost didn't get on. The union was going to boycott. It was unheard of that some non-union person was going to operate equipment. "What do you mean it doesn't use a camera?" They sort of knew there was something wrong with this; that it was bad for them.

M2: What should TV be in the Beckian worldview?

SB: Over the years, TV has atrophied the ability to "image." Video and idea both derive from the Latin "videre." The idea was to see. Tesla could see things so clearly he didn't even have to make drawings. He could draw what he'd seen in his vision, in his mind's eye. When he saw a rotating dynamic alternating current, electromagnetic fields and how they could generate forces... he could see that so clearly that he could see how to build the motor. Then he could draw it. His lab burned down from time to time, and he'd have to sit down and draw more versions. So here is someone with an incredible eidetic power, the power of visualization. Television has robbed us of this power while giving us so many other potential gifts. If it could come back around to rekindle the imagination... Maybe it'll work by everybody having the tools to create images.

If you understand the technology behind color television, it is truly phenomenal. If, 150 years ago, you were about to head out on the Oregon Trail, and you said to someone that some day there'd be this box sitting in a saloon with pictures on it from halfway around the world, everyone would say, "Sure. Give him another whiskey."

M2: So what will the exact equivalent of that be 50 years in the future?



SB: I can't reveal the answer to that at this time. But you can imagine. MAX... molecular fax. The ability to transmit replicas of solid material objects from one point to another without physically moving the molecular structure. But will the replica have all the characteristics, psychologically and spiritually, of the original? Unknown!

M2: Will VR play a role in your plans?

SB: I have a problem with VR. The term is a non sequitur. *All* this stuff is virtual reality. It always has been. The fading frontiers of whatever VR was supposed to be is just so much semantics. TV is VR. Realtime holographic video will happen in 50 years. It will be commercialized and exploited and as commonplace as radios and TVs today. By the year 2040.

M2: What's the next hot trend?

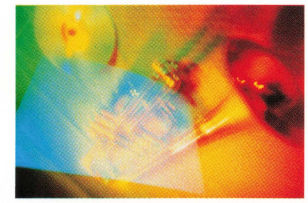
SB: Video junk mail with everyone's videophones. And videophone sex services.

M2: And L-TV will play a role in that?

SB: Sure. Using a computer, synthesizations of some idealized partner will be created in realtime and converted. It will use expert systems and artificial intelligence and natural stupidity. But this will be displaced by the latter half of the 21st century by the discovery of molecular experience encapsulation. Where the whole experience can be encapsulated in chemical form through nanotechnologies. So when you take this pill you can take a trip to the Himalayas. It will operate at a much more sophisticated level than simulation of our oral/video/tactile sensations with crude low-bandwidth television and digital radio. So that'll be the 21st century. It won't be electronic. The actual medium will be molecular/chemical. That was astute of Terence McKenna to recognize TV as a drug in *Food of the Gods*. And then people will crave these experiences, much as they do television. Craving, desire—that's what keeps the engines of creation going. M2

Stephen Beck is a video artist, composer and musician. His inventions include the first handheld sound & light game, virtual personality toys, and energy-saving computers. He is chief scientist and co-founder of Lapis Technologies of Alameda, CA. Brain Soma *is available in Japan at Tokyo's WAVE record store or Tower Records. Produced by Mitsuhiro Takemura on the Interzone label.*

Kevin Evans



Power Japanese

Power Japanese
BayWare, Inc.

Those of you who've had it up to here—you know where I mean—with "language learning software" consisting of two tapes and a book of silly-ass stilted phrases you hope to Cthulu you'll never use, hold on to your honorable socks. Trust me.

First—for this is the way I do things, ask anybody—the brutal reality, close-captioned for the generally impaired: learning Japanese has traditionally been what is technically known as "a bitch." After all, you have to completely unlearn the roller-coaster inflection of English, there are around 10^6 ways to lisp on the wrong syllable and call your candlelight-and-wine date a syphilitic cow, and telling someone "thank you" with the wrong politeness level can be much like hocking a loogie at them.

Chris Hudak

And after all *that*, you're still illiterate. Wocka-wocka.

Well, relax. With a slick, muscular product called Power Japanese, a little San Mateo company called BayWare is sending a powerful message to all other producers of so-called language learning software. That message is: **YOU SUCK, GIVE UP.** Power Japanese is everything you've wanted: a comprehensive, interactive, challenging (and occasionally weird) method of speaking, reading, writing, listening—that's right, it talks to you too—and thinking in another language. And it's *fun*.

The program gets you started right away learning the basic kana (yes, there's a forthcoming kanji supplement, don't get ahead of me goddammit), both visually and aurally, which you will eventually use to put together whole sentences. You're given an on-screen virtual keyboard for drills in which you plug the proper character/syllable into slots to complete phrases—yes, inside of *ten minutes*, you're actually learning to mentally attach sounds and meanings to weird, squiggly alien characters which become progressively less alien.

The program is a delight to the eyes and ears, with bright, tight abstract graphics, manic Tetris-esque drills, animated sequences illustrating proper social conduct, over 2000 high-fidelity digital recordings of native Japanese speakers, and even an occasional straight-out-of-deep-space-what-the-hell "rest screen."

A serenely jarring thing, a "rest screen" may be a landscape, sometimes accompanied by a haiku or, say, an Emily Dickinson poem, which pops up out of *nowhere* and serves absolutely no other purpose than to throw your hardworking brain off track a bit, zap your PRAM a tad before returning you to your studies. Nobody knows why, but this kinda thing *works*, people: they've proven it.

Power Japanese is indeed very Japanese in style—reserved, clean and functional on the surface... and *freaking out* just below that surface, ready to provide you with a manic burst of much more service than you could conceivably need. If you get a little lost, you merely click on a character or phrase to get its sound, its instant translation, or instructions on what to do with it, as appropriate. And none of that anglicized, half-assed Velveeta-on-a-crutch *romaji*, either, buddy-san—Power Japanese proceeds on the philosophy that the best way to achieve a solid structure is to build from a real base. As an obscure Japanese scholar once opined, "Just do it."

And here's the thing—use the program, use the workbooks, do what they say, and you *will* be reading, writing and speaking Japanese in *six weeks*. Stop and read it again. I personally testify that I learned more in ten minutes on this thing than my last three *nihonjin* girlfriends were able to pound through my skull. (If I'd had Power Japanese, maybe I wouldn't have called them all syphilitic cows. Accidentally. Hmm...)

Finally, Power Japanese gives you that heady feeling that we Americans just live on—that by God you've really *bought* something. It gives you a pocket dictionary, two thick kana practice manuals, a printer-port sound adapter plug for stereo headphones, *said headphones* (and nice ones, too... use 'em with your CD player when you're done), a bazillion disks, and a nice stack of flashcards for study when you're away from your computer out there in Meatland.

For the moment, Power Japanese runs on a 286/386 IBM or full-compatible PC with windows 3.0, VGA/Super VGA, and at least two megs of RAM, but BayWare assured me that a Macintosh version has long been considered, and they assured me that it's in the works. I think they would have assured me of just about anything, if it would have gotten me off their equipment. MB

Dirty Little Secrets: Shiny-Brite Swiss Bank Accounts

Norman French

PATRIOT GAMES

Here's the dirty little secret they never taught you in civics class: Countries are nothing more than competing protection rackets. They use the patriotism scam to keep their involuntary clients (citizens) from complaining too much. People will put up with an amazing amount of crap if it comes wrapped in a flag. At the same time, they fawn all over potential voluntary clients (tourists, investors, businesspeople, etc.). So what do you do when your government takes you for granted, but bends over backwards for outsiders? You do what the Big Boys do; you go into the "outsider business."

The multinational corporations have been doing this for years. Shipping companies were probably the first to recognize the advantages of internationalization. Why register ships in high-tax, high-regulation jurisdictions? Ships spend most of their time in international waters. Why not fly the Panamanian or Liberian flag if it's cheaper and means less hassle? In shipping—and every other area of life—idiot patriotism can be very expensive.

YOU CAN BE A LITTLE "BIG GUY" TOO

After adjusting for inflation, the costs of international communications and transportation have declined to the point where even the average individual can afford to internationalize. And countries around the world are vying for that business. You can take advantage of what these countries have to offer to safeguard your freedom and privacy using exactly the same techniques as *Fortune 500* companies. Below, are a few of the resources that will help you diversify internationally.

BANKS

There aren't any banks in the United States—not real banks in the international sense. Just about anywhere else banks offer a variety of services not available in America. Foreign banks can manage trusts, participate in joint ventures with clients, trade securities and commodities, do real estate deals—almost anything. Most importantly, "tax haven" banks can and will vigorously protect your privacy. Even Americans don't need to report offshore bank accounts if they have total assets of less than U.S. $10,000. Haven banks are central to any plan for personal internationalization. The largest banking tax haven in the world is the United States—for non-Americans, that is. For years, foreigners have enjoyed politically stable, discreet, tax-free banking in the U.S. So Rule Number One is: Look for banking havens outside your own country. While every country treats foreigners better than locals, some have bent over backwards to make a business of it. These are the traditional tax and banking havens. A partial list would include Switzerland, Hong Kong, Cayman Islands, Gibraltar, Bahamas, Turks and Caicos, Panama, Liechtenstein, Channel Islands, Luxembourg and Isle of Man. Rule Number Two: Locate the traditional banking havens that have the banking, business and tax features that best suit your situation. How do you do that? You do research.

Thousands of books, magazines, newsletters and seminars have been devoted to the subject

Tim Brock

brock

of asset and privacy protection through the use of tax and banking havens. Hike yourself down to your local library. Several subjects and authors you should look for are: Tax Havens, Offshore Banking, Mark Skousen, Harry Browne, Doug Casey and Bill Hill. What you find under these headings will suggest other topics and writers to explore. Read from as many different sources as you can.

Rule Number Three: *Caveat Emptor*. Read with a critical eye. This field, like no other, is full of people who want to sell you something. This is especially true of recommendations on specific offshore banks. It is not uncommon for writers to get a kickback from banks they push. One book that is an excellent survey of offshore banking and related subjects is *The Closing Door: The End of Financial Privacy in America and How to Protect Yourself* by Michael Ketcher. Ketcher is thorough, insightful, and doesn't take kickbacks. The book costs $68 but is free with a subscription to a newsletter called "The Financial Privacy Report," which Ketcher edits. The normal subscription price is $292 for 12 issues, but MONDO readers can get it for the discounted price of $96 (with the book thrown in). The address is: P.O. Box 1277, Burnsville, MN 55337.

Some other suggested books are: *The International Man* by Doug Casey, *Tax Havens* by Anthony S. Ginsberg; and *Bank Accounts: A World Guide to Confidentiality* by Edouard Chambost. After you have read the general literature, research banks separately. The reference librarian can direct you to the *Bankers' Bluebook* and other sources. When all this is done, you should contact the banks directly for brochures and account application forms.

CREDIT CARDS, PLUS

When you get an ATM card for your bank account or have a domestically issued credit card, you think of it only as a convenience. When you have foreign issued ATM and credit cards, however, you also have powerful tools for financial privacy. In countries such as the United States, your banking and credit card records are easily obtainable by the government, making your life an open book. Checks written to liquor stores tell something about you, as do credit card purchases of mail order "marital aids." If you make an ATM cash withdrawal in a "known drug trafficking area" you might suggest something else about yourself. When your check, credit card and ATM card transaction records are beyond the reach of local authorities, your financial business remains your own.

ATM and credit cards leave no useful audit trails. Their use is as close to anonymous as most folks need to get. Still, for those who demand even more privacy, accounts opened in alternative names or in the names of offshore corporations (see below) are nearly as anonymous as cash. As long as you are only dealing with ATMs and point-of-sale terminals, you won't need to show any ID. All you need in a valid PIN, and the deal is done. Foreign-issued ATM and credit cards work just fine in most countries. ATMs on either the Plus or Cirrus system can be found in most major countries. New countries are getting on these networks every day. And it doesn't matter in what national currency you have your foreign account. When you make a local currency transaction, the equivalent funds are charged to your account at the inter-bank exchange rate—the favorable rate banks charge themselves. In addition to ATM and credit cards, many foreign banks offer "debit cards." They are issued under the Visa and MasterCard imprimaturs and used in exactly the same way in the same places. The difference is, they do not represent an extension of credit. Each transaction is immediately deducted from your bank account much as is the case with a check. Your "credit limit" is the balance in your account. You pay no interest on transactions. In fact, most accounts pay you interest on your balance. You cannot over-extend yourself because you can't withdraw more than you have deposited.

CORPORATIONS, TRUSTS, ETC.

You should use a personal foreign corporation, trust or other legal entity as your stand-in when privacy is an issue. This is especially true when you want to be treated like a foreigner in your home country. Since these entities are separate legal persons, they are citizens of their country of incorporation or formation. When they do business in your country, they are treated as what they are—foreigners. When properly structured, foreign corporations and trusts will conceal the identity of the true parties. Tax and banking havens go out of their way to make provisions in their laws for nominee incorporators, anonymous bearer shares, non-disclosure laws, etc. Avoidance of taxes, nuisance suits, or draconian property seizures are some of the reasons people use foreign legal entities. What is important to know is that these tools can be used very creatively. Your overseas lawyer or business service can help you get the most out of whatever entity you choose.

While it is possible to do all the work yourself, it isn't really practical. A foreign lawyer can be useful, but they present several difficulties: you have to find them, you have to assure yourself they're honest, and you have to pay their fees (they aren't cheap). A better solution is to use the services of a company which specializes in these sorts of business services. For a set fee they will incorporate a

corporation or form a trust or some other legal entity. In addition, they will provide yearly filing services, remailing, and hold annual shareholder and board of director meetings—everything to meet legal requirements while protecting your privacy. Initial costs will be anywhere from U.S. $400 to U.S. $3000 depending on your choice of entity and jurisdiction. Annual costs should be from U.S. $200 to U.S. $1000. You can find ads for companies offering such business services in international publications such as *The Economist*, *The International Herald Tribune*, and *The European*.

SECOND PASSPORTS

Dual citizenship is a sensitive topic. There are many ways to get foreign passports—some of them legal, some questionable, and others illegal as sin. And not all the folks who are in the biz are nice people.

Nevertheless, second passports can be very valuable. They allow you to work and live in other countries, to travel more anonymously, or even to avoid being singled out for kidnap or execution by terrorists. If either or both of your grandparents was Spanish, Irish or German, you are probably entitled to the corresponding passport. If you are Jewish or if you marry a citizen of a foreign country, you may be eligible for a second passport. There are a surprising number of ways governments decide who may be considered one of their nationals. As a result, almost anyone can get a second passport if he or she wants it badly enough.

Just as with foreign corporations, you can find second passport services in the international newspapers listed above. Also, Loompanics up in Port Townsend, Washington has several interesting books on the subject of passports. As stated above, this area is very sensitive. Scams, half-truths and exorbitant fees are not uncommon. You should be EXTREMELY cautious when dealing with those who purport to be experts in this field.

MAIL DROPS AND MAIL FORWARDING SERVICES

No matter which offshore techniques you use, you will probably have to communicate with someone overseas on a regular basis. Audit trails and eavesdropping are to be expected with most forms of electronic communications. When it comes to physical deliveries, remember: The post office is not your friend, either. When asked by other government agencies, they will gladly put a "mail cover" on you. To perform a mail cover, postal employees will make a record of the return address of every letter you receive. A list of your correspondents is then given to the requesting agency for whatever follow-up they intend to do. Similarly, postal employees can report "red flag" return addresses to interested government agencies. Your privacy can be compromised in this manner if you are sending or receiving sensitive correspondence. For example, if you write a letter to *High Times* your address could be put on some government list if there is a mail cover on *High Times* (what are the odds?). Likewise, receiving a letter from an offshore bank could trigger another look into your affairs.

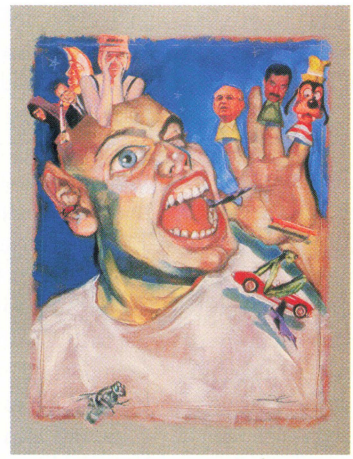
The best protection against this sort of snooping is the anonymous use of mail drops and mail forwarding services. In this case, "anonymous" means that you use a *nom de guerre* for your correspondence and when using mail drop and forwarding services. In most English-speaking countries, at least, it is perfectly legal to use any name you wish—as long as it is not for purposes of fraud. Probably everyone is familiar with mail drops. These private businesses offer post office box rentals, copying, faxing, wrapping and other associated services. Some are franchise operations, some independent. The mom-and-pop ones tend to be less concerned with the identity of their customers.

Mail forwarding services, as the name implies, provide two services. They receive and forward mail for persons who move around a lot, or who wish to conceal their true location. They also remail letters their clients send to third parties, also for the purpose of concealing the client's location. A common example of this is run-away battered wives who need to communicate with their abusive husbands, but fear they will track them down.

You can find local drops and forwarders in the Yellow Pages under "Mail Receiving and Forwarding Service." A much more comprehensive source of information is *Directory of U.S. Mail Drops* by Michael Hoy. In addition to domestic services, it has a very important appendix which lists foreign mail drops and forwarding services. You can get the directory from Loompanics Unlimited, P.O. Box 1197, Port Townsend, WA 98368. Loompanics publishes the most subversive book catalog in the world. Get one—you won't believe it.

"Transnational" law is a convoluted arena. While the stratagems discussed above aren't for everyone, they are far more applicable to most people's lives than they realize. Offshore corporations have allowed huge corporations to reduce their taxes to the barest minimum. Secret bank accounts in Switzerland saved the lives of more Jews during WWII than the military might of the Allies. And thousands of individuals, just like you, have given themselves the gifts of privacy and freedom through personal internationalization. M2

Xandor Speaks: Somalia, SETI, and Shadow Ecology



Julia Colmenaries

Dear hypnotized brainwashed robot sheep: While you were dozing off in your CNN-induced stupor, neo-Hitler-terrorist supertraitor Bush acquired Somalia as a strategic oil resource by creating famine, coldly watching millions die (blaming it on the innocuous Khat) and thus raising a public outcry to justify sending in his colonial army to take over. (Four major oil companies have exclusive concessions to explore and exploit tens of millions of acres, reports the *Los Angeles Times*.) He even blatantly ran the State Department from the Conoco compound in Mogadishu. And he's been quietly sending troops into Madagascar, disguised as eco-police. Captain America saves "genetic resources" for future generations—at the risk of killing off the native Malagasi. Don't let those big-eyed lemurs pull your heartstrings. A cover for a military toehold and a new mandate to police the planet—the shadow ecology mission articulated in Gore's "Strategic Environmental Initiative" ecofascist manifesto.

The Somalia invasion set a precedent: The UN army can now be sent into any country to quell an urban uprising, for instance. No invitations required.

Meanwhile, the unholy Bush/Reagan duo has covertly supplied arms all along to warring factions in Yugoslavia to destroy the only remaining Balkan rebel against total U.S.-German world domination. How super criminal Nazi-symps Bush and Reagan and their power-thirsty neo-nazi German conspirators systematically committed genocide, econocide, and military takeover of these strategic countries is documented in *Covert Action Quarterly* (202) 331-9763. The story has been TOTALLY suppressed in the U.S. print and broadcast media, which is run by just 29 corporations. In case you haven't realized it, you're living in an almost total media blackout/travesty.

Example: did you know that supertraitor Soviet spy Kissinger was vice chairman of Iraqgate conspirator Banca Nazionale del Lavoro and gave secret advice and support to Saddam Hussein on building his war machine? That Kissinger's long-time mentor, head-Trilateralist David Rockefeller, has also been linked to the Iraqgate conspiracy by British court documents? As have Eagleburger and Scowcroft, who ran foreign policy under Bush? (See *Spotlight*, Jan. 4, 1993, (202) 546-5621.) Explain to me why all these traitors have not been publicly whipped & jailed!

But of course Clinton will end this nightmare, you say. Wrong. Unlike low-level peon Bush, he's a member not just of the Trilateral Commission but also of the Bilderberg, the world shadow government that secretly meets once a year to plot strategies for one-world government. Another Reaganesqe paid actor hired by the Rockefellers, who bought Arkansas as a playground. In fact, Clinton was named the next U.S. president in the 1991 Bilderberg meeting in Baden-Baden, Germany. Clinton has recruited a team of loyal Bilderbergers (such as Bentsen and Rivlin), along with assorted Trilateralists like Warren Christopher from the Carter administration, as well as John Rollwagen, Chairman of Cray Research, which shipped a supercomputer to Iraq just before the war. Clinton, like Bush, is in fact a stooge of the British aristocracy. *The World Order: Our Secret Rulers* points out that Rhodes scholars—like Clinton—are trained to reunite American Colonies with the Rothschild-controlled British Empire (New World Order).

Clinton and Gore, along with several of his cabinet officers (Cisneros, Rivlin, etc.), are Communitarians, a bizarre "academic" cult based in Washington, DC that intends to abolish individual constitutional rights for the common good. (Sound familiar? Read Karl Marx.) Communitarians want total control of society: sobriety and drug checkpoints, for example. Note: Clinton's homeless in Army barracks and the new military-style "boot camp" for prisoners at San Quentin should provide a handy source of brainwashed community-service slave labor.

Communitarians want a Soylent Green-style law that would force you to donate organs when you're down to "part-brain death" (whatever the hell that means).

The Russians have put up a "space mirror" that lights up cities. What's next? Universal TV surveillance, as in Germany right now? Mandatory microphones built into in all new sofas and chairs, as required by a bizarre new Russian law? Virtual prisons? "A Nation on Probation"? Is this what Clinton had in mind when he proposed a new "Civilian DARPA" to the IEEE—consumer home surveillance? Or what Gore intended for the data superhighway? Is this finally Virilio's new "endocolonialism"—turning the cameras on ourselves?

And what about those mysterious unmarked black helicopters, manned by black-uniformed (the "men in black"?) FEMA and "Robocop" Wackenhut operatives, seen around the country (heaviest in Colorado), like the ones encountered by people investigating the UFO testing facility at Area 51 near Las Vegas? UFOs have also been seen in these areas. These helicopters are servicing the 100-plus clandestine underground bases that house the secret government. Are these also underground alien centers, where the thousands of abductees are taken for gross genetic experiments?

What the hell is our government doing about it? Covering up yet again. NASA has revived the SETI (Search for Extraterrestrial Intelligence) program and is now using powerful new radio-telescope receivers that scan 14 million microwave channels simultaneously. (The Vatican Observatory, located in Arizona, is teaming up with NASA. The Vatican staff astronomer says aliens raise profound theological questions: for example, should they should baptize the aliens?). In *Out There, New York Times* reporter Howard Blum claims the NSA took over the SETI project and clamped a lid on intelligent signals.

The time is short. Don't let them take our few remaining freedoms. Take action. Fax this letter to everyone you know. Call your congressperson at the U.S. Capitol switchboard (202) 224-3121 and demand a full investigation "Communism is dead, and now we are the enemy," says Hakim Bey. We stand perilously on the brink of a digital totalitarian takeover. Vigilance!!!

—Xandor Korzybski

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NEW FAST AUTOMATIC DAFFODILS

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The new album featuring the singles

stockholm

&

it's not what you know

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Virtual Reality Products Catalogue and Resource Guide

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